INDEX OF TEXAS ARCHAEOLOGY

Open Access Gray Literature from the Lone Star State

Volume 2009

Article 37

2009

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Frankston Phase Ceramics from the Alcoa #1 (41AN87) Site, Mound Prairie Creek, Anderson County, Texas

Timothy K. Perttula

INTRODUCTION

In 1990, Amick et al. (1991) investigated a well-preserved Late Caddo Frankston phase midden deposit at the ALCOA #1 (41AN87) site on Mound Prairie Creek, about 7 km northeast of Palestine, Texas. During the course of that work, more than 900 Caddo ceramic vessel sherds and a few pipe sherds were recovered, but they were only cursorily described by Amick et al. (1991). That was unfortunate at the time because it appeared then, and is still evident now, that the ALCOA #1 site was a single component 15th century A.D. Frankston phase settlement, and detailed study of the recovered ceramic assemblage would have provided unique insights into the stylistic and technological character of the ceramic vessels being made and used for culinary purposes by the prehistoric Caddo in this part of the Neches River basin.

With the renewed study of the archaeology of the Frankston phase occasioned by the Texas Department of Transportation-sponsored excavations at the Lang Pasture site (41AN38, Perttula et al. 2007)—and the recovery there of a substantial ceramic sherd assemblage—and the reexamination of sherd and vessel collections from Frankston phase collections at the Texas Archeological Research Laboratory, The University of Texas at Austin, I returned to the detailed study of the ALCOA #1 ceramic assemblage. The assemblage of ceramic vessel sherds from the Amick et al. (1991) work is sufficiently robust that it is possible to characterize with some precision the use of fine wares, utility wares, and plain wares by the 15th century A.D. Caddo that lived at the site.

SITE INVESTIGATIONS

The ALCOA #1 site covers no more than 0.5-1 acres in size, with a ca. 100 m² trash midden deposit that is 60-70 cm in thickness. In 1990, Amick et al. (1991:Figure 1) excavated a single 1 x 1 m unit

(Unit 1), excavated in 10 cm arbitrary levels, in the heart of the midden deposits. A large quantity of ceramic vessels (to be described below), animal bones (n=799), and charred hickory nutshells were recovered in the midden excavations. Calibrated radiocarbon dates obtained from charred nutshells in level 4 (30-40 cm bs) and level 6 (50-60 cm bs) in Unit 1 were: AD 1380-1514 (2 sigma, 0.75 relative area under probability distribution) and AD 1294-1437 (2 sigma, 1.00 relative area under probability distribution), respectively. Calibrated intercepts of the two radiocarbon age ranges were AD 1426 (level 4) and AD 1407 (level 6), suggesting an occupation that began in the early 15th century A.D.

THE CERAMIC ASSEMBLAGE

The ceramic assemblage from the ALCOA #1 site includes 913 vessel sherds (Table 1) and seven elbow pipe sherds (Table 2). This is a very high density of more than 1300 vessel sherds and 10 pipe sherds per m³ of midden archaeological deposits, and this density suggests that there is an estimated midden content of ca. 91,000 vessel sherds from hundreds of different vessels and ca. 700 pipe sherds from at least 25-50 different pipes. The highest densities of sherds occur at the top and bottom of the midden deposits (see Table 1), but the densities remain quite high throughout the midden deposits, suggesting a continuous accumulation of broken vessels and vessel fragments during the course of the Frankston phase Caddo occupation.

Of the 913 vessel sherds from the ALCOA #1 site, 335 are decorated. The plain to decorated sherd ratio in this Unit 1 assemblage is 1.73.

Methods of Analysis

Detailed analysis of the ceramic sherds (about a 33% sample) from the ALCOA #1 site (Appendix

Table 1. Provenience of Ceramic Sherds from the ALCOA #1 (41AN87) Site.

Provenience	Plain wares	Utility wares	Fine wares	N
Unit 1, lv. 1	143	52	9	204
Unit 1, lv. 2	73	43	7	123
Unit 1, lv. 3	68	41	8	117
Unit 1, lv. 4	73	36	10	119
Unit 1, lv. 5	61	38	12	111
Unit 1, lv. 6	136	50	12	198
Unit 1, lv. 7	24	15	2	41
Totals	578	275	60	913

Table 2. Provenience of Pipe Sherds from the ALCOA #1 Site.

Provenience	Pipe bowl sherds	Pipe stem sherds	N
Unit 1, lv. 2	2	—	2
Unit 1, lv. 3	3	—	3
Unit 1, lv. 6	2	—	2

1) is based on differences in temper, type of sherd (i.e., rim, body, or base), rim and lip form (cf. Brown 1996:Figure 2-12), decoration (if present), surface treatment (smoothing, burnishing, or polishing; see Rice 1987), and firing conditions (cf. Teltser 1993). Sherd cross-sections were inspected macroscopically and with a 10X hand lens to determine the character of the paste and its inclusions. Determining the firing conditions is based on the identification of the firing core in the sherd cross-sections and the identification of oxidation patterns as defined in Teltser (1993:535-536 and Figure 2a-h) and Perttula (2005:Figure 5-30i-l).

More specifically, the following attributes were employed in the analysis of the vessel ceramics: (a) temper, the deliberate and indeterminate materials found in the paste (Rice 1987:411), including a variety of tempers (grog or crushed sherds, grit or crushed quartz pebbles, and burned mussel shell) and "particulate matters of some size;" (b) although most of the sherds are small and thus from indeterminate vessel forms, where sherds were large enough, vessel form categories include open containers (bowls) and restricted containers, including jars and bottles. Other form attributes include rim profile (direct or vertical, and inverted) and lip profile (rounded, flat,

or folded to the exterior). In a few cases, base shape could also be recorded. Observations on ceramic sherd cross-sections permit consideration of oxidation patterns (Teltser 1993:Figure 2), namely the conditions under which a vessel was fired and then cooled after firing. Finally, wall thickness was recorded in millimeters (mm), using a vernier caliper, along the mid-section of the sherd.

With respect to interior and exterior surface treatment on the sherds, the primary methods of finishing the surface of the vessels includes smoothing and burnishing, and polishing. Smoothing creates "a finer and more regular surface...[and] has a matte rather than a lustrous surface" (Rice 1987:138). Burnishing creates an irregular lustrous finish marked by parallel facets left by the burnishing tool (perhaps a smoothed pebble or bone). A polished surface treatment is marked by a uniform and highly lustrous surface finish, done when the vessel is dry, but without "the pronounced parallel facets produced by burnishing leather-hard clay" (Rice 1987:138).

Decorative techniques present in the ALCOA #1 site ceramic sherd collection include engraving and engraving-punctuation in the fine wares, and incising, incising-punctated, punctated, brushing, applied, and pinching in the utility wares.

Engraving was done with a sharp tool when the vessel was either leather-hard or after it was fired, while the other decorative techniques were executed with tools (incising and punctation with wood or bone sticks or dowels and brushing with frayed sticks or grass bundles), with finger impressions (pinching) when the vessel was wet or still plastic, and by adding strips and nodes of clay to the vessel body (applied).

The 335 decorated sherds from the site (see Table 1) are readily separated into fine wares ($n=60$) or utility wares ($n=275$), following the distinctions discussed by Schambach and Miller (1984) at the Cedar Grove site in the Great Bend area in southwestern Arkansas. These distinctions include apparent differences in temper, surface treatment, vessel forms, and decorative methods. Utility wares generally are jars and simple bowls used for the cooking and storage of foods, have a coarse temper, and lack burnishing, polishing, or slipping on interior and exterior vessel sherd surfaces. Such vessel sherds are decorated with brushing, incising, punctations (tool, cane, or fingernail), and applied elements, either by themselves or in combination with one or more of these decorative methods (see Perttula et al. 1995; Schambach and Miller 1984; Suhm and Jelks 1962). Fine wares, on the other hand, consist principally of engraved and slipped vessel sherds from carinated bowls, some simple bowls, and bottles. The fine ware vessel sherds more frequently are smoothed or burnished on the exterior vessel surface, and as will be discussed in more detail below, the fine ware vessels from the ALCOA #1 site were made, fired, and used in different ways than were the utility ware vessels.

Fine Ware Sherds

The fine ware sherds from the ALCOA #1 site include 15 rims and 45 body sherds with either engraved ($n=57$, 14 rims) or engraved-punctated ($n=3$, 1 rim) elements; they comprise 17.9% of all the decorated sherds from the site. More than 27% of the rims from the site are from fine ware vessels. It is likely that with the exception of bottles, which were engraved on the bottle body, the other engraved sherds were from vessels (i.e., carinated bowls) that were decorated only on the rim panel. About 8% of the engraved fine ware sherds have had a hematite-rich red clay pigment smeared into the engraved design (see Appendix 1); there are no red-slipped fine ware sherds in the assemblage. All

of the engraved sherds appear to be from Poynor Engraved vessels.

The 14 engraved rim sherds include six with a single horizontal engraved line on it, probably either the top or bottom of the rim panels that encircle the engraved carinated bowls. One other has closely-spaced diagonal engraved lines, probably part of a scroll, as is a second rim with horizontal and diagonal lines. A third miscellaneous engraved rim has horizontal, diagonal, and vertical lines that form part of a hatched triangle attached to a larger, but unidentifiable, Poynor Engraved motif. Three rims are from Poynor Engraved, *var. Hood* carinated bowls (Perttula 2008) in that they have horizontal engraved lines under the lip as well as portions of hour glass-shaped columns that extend from near the rim to the vessel carination (Figure 1d, l). The remaining two rims with engraved decorations from the ALCOA #1 site are from Poynor Engraved, *var. Lang* carinated bowls (see Perttula 2008). These have hatched or cross-hatched central circles (see Figure 1e, h) with a larger engraved motif (ovals or triangles) on the rim panel.

Eleven body sherds with engraving have portions of hatched elements and motifs commonly found on Poynor Engraved vessels. Among these are six with hatched triangles (see Figure 1f-g) at the corners of larger but unidentifiable motifs, three with curvilinear hatched areas, probably also forming triangular elements attached to a larger motif (see Figure 1a-b), probably oval-shaped areas on a rim panel. Another body sherd—of uncertain orientation—has curvilinear hatched triangles in one area and a set of closely-spaced parallel engraved lines in an adjacent area (see Figure 1i).

The remaining engraved sherds include seven with a single straight line, three with sets of curvilinear lines (see Figure 1j, on a carinated bowl), six with opposed sets of lines, and eight with closely-spaced parallel engraved lines.

There are several engraved bottle sherds ($n=7$, see Appendix 1) in the fine ware assemblage. With two exceptions, these have sets of curvilinear lines on the vessel body, but the overall motif is unidentifiable. The other two have either closely-spaced parallel or horizontal-diagonal engraved lines on the bottle body.

The first of the engraved-punctated sherds is a body sherd from a bottle. The small piece has a straight engraved line adjacent to a zone filled with small etched tool punctates. The two others are from one version of decorated Poynor Engraved, *var. Lang*

Figure 1. Drawings of selected Poynor Engraved rim and body sherds from the ALCOA #1 site: a-b, d-j, l, engraved; c, k, engraved-punctated.

carinated bowls (Pertulla 2008). Both have small engraved circles filled with etched tool punctations (see Figure 1c, k), and these punctated-filled circles are centered within large ovals repeated on the rim panel.

Utility Ware Sherds

The utility ware sherds appear to be from the decorated portions of jars, probably used for cooking and/or food storage. These include 26 rim sherds (mainly from vessels decorated with incised or fingernail punctated elements) and 249 body sherds, or 82.1% of all the decorated sherds from the ALCOA #1 site. Many of the decorated utility ware sherds have brushing marks (Table 3), particularly on body sherds. Approximately 70% of the utility ware body sherds have brushing marks on them, but only 15% of the utility ware rim sherds, indicating that brushed decorations were confined primarily to the bodies of jars. Other important decorated utility wares include sherds from vessels with incised designs (15.6% of all the sherds and 50% of the rims), fingernail punctated sherds (8.7% of all the utility ware sherds and 19.2% of the rims), and incised-punctated vessel

sherds (3.6% of all the utility ware sherds and 11.5% of the rims) (Table 3).

The three brushed rims from the ALCOA #1 site have either vertical ($n=1$) or horizontal ($n=2$) brushing marks on them. Jar vessel bodies have primarily parallel (or vertical) brushing (89% of the brushed body sherds, $n=150$), with overlapping brushing (9.5%, $n=16$) or opposed brushing (1.2%, $n=2$) elements decidedly less well represented.

A few other sherds (see Table 3) have brushing in combination with other decorative methods. Four have brushed-incised elements, including one rim with vertical brushing-incising, one body with parallel brushed-incised lines, and two other body sherds with parallel brushing marks with overlapping incised lines. One body sherd has a single vertical row of pinching adjacent to a panel filled with diagonal brushing (Figure 2o). Another body sherd has a row of tool punctates above an area with vertical brushing marks; the tool punctated row is probably at the rim-body juncture. The last such body sherd has overlapping brushing marks and a straight incised line, with fingernail punctates pushed through the brushing.

Table 3. Decorated Utility Ware Sherds.

Decorative method	Rim sherd	Body sherd	N
Brushed	3	168	171
Brushed-incised	1	3	4
Brushed-punctated	—	1	1
Brushed-pinched	—	1	1
Brushed-incised-punctated	—	1	1
Fingernail punctated	5	19	24
Tool punctated	1	8	9
Linear punctated	—	1	1
Pinched-punctated	—	1	1
Incised	13	30	43
Incised-punctated	3	7	10
Appliqued	—	5	5
Appliqued-punctated	—	3	3
Appliqued-incised	—	1	1
Total	26	249	275

Vessel sherds with incised line decorations are an important part of the decorated utility wares at the ALCOA #1 site. As previously mentioned, more than 15.6% of all the utility ware sherds are incised, as well as 50% of all the utility ware rim sherds (see Table 3).

The incised rim sherds are dominated by those that have sets of diagonal incised lines ($n=7$ or 54% of the incised rims), usually widely-spaced around the rim. Other rims with incised line decorations include one with cross-hatched incised lines, another with horizontal incised lines, one with horizontal and diagonal lines, and a fourth with vertical and diagonal incised lines. Two more distinctive incised rims include: one with large alternating and hatched incised triangles (see Figure 2b) that extend from the rim to a set of horizontal incised lines farther down the vessel body, and another with large alternating triangles and triangular incised corners where the hatched lines are pitched in different directions (see Figure 2c); this rim also has pinched strap handles that apparently served to divide the incised rim panel.

Incised body sherds have almost exclusively simple straight or geometric designs; one incised body sherd has a series of curvilinear lines. This includes 12 with a single straight incised line, 13 with parallel sets of lines (orientation on the vessel is uncertain), and three with opposed incised lines

(see Figure 2d). Of those with parallel incised lines, 85% have widely-spaced and parallel lines; the others are closely-spaced.

Including one pinched-punctated sherd, 12% of the utility ware sherds (and 23.1% of the rim sherds) from the ALCOA #1 site have punctated decorative elements ($n=35$ sherds). Most of these are fingernail punctated, either in vertical panels ($n=5$) on rims (see Figure 2a) or in rows ($n=18$) on the vessel rim or body. One body sherd has free or randomly placed large fingernail punctates. One tool punctated rim has sets of vertical panels, but the eight body sherds have one or more rows of tool punctations. Another body sherd has rows of closely-spaced linear punctations. Finally, one body sherd has a rectilinear row of pinching that encloses a zone filled with fingernail punctations (see Figure 2n).

Incised-punctated sherds ($n=10$) comprise 3.6% of all the utility ware sherds, and 11.5% ($n=3$) of the utility ware rim sherds. In eight of the 10 sherds, the decoration consists of either straight, diagonal, or opposed incised line elements that have been employed to create zones filled with tool punctations ($n=7$) or fingernail punctations ($n=1$). These incised and punctated-filled zones may be triangular (see Figure 2g) or rectangular panels (see Figure 2h), or sherds with combinations of different-sized triangles (see Figure 2i) on a vessel rim. Two sherds have

Figure 2. Utility ware decorated sherds from the ALCOA #1 site: a, fingernail punctated panel; b-d, incised; e-i, incised-punctated; j-k, applied; l, applied-incised; m, applied-punctated; n, pinched-fingernail punctated; o, pinched-diagonal brushed.

circular or curvilinear incised elements, one an incised circle filled with tool punctations (see Figure 2f) and the other with sets of curvilinear incised lines and a tool-punctated zone of uncertain form.

Nine body sherds have applied decorations (see Table 3), 3.3% of all the utility ware sherds. The most common include applied nodes ($n=1$), ridges ($n=3$, see Figure 2k), or ridges and nodes ($n=1$, Figure 2j). One jar handle has three vertical applied ridges on it. Three other body sherds have either ridges ($n=2$) or nodes ($n=1$) on the vessel body, with fingernail punctated ($n=2$) or tool punctated ($n=1$,

see Figure 2m) rows or zones adjacent to the applied elements. Finally, another sherd—possibly part of a jar handle—has a broad applied ridge with three applied nodes on it; adjacent to the broad applied ridge are several diagonal incised lines (see Figure 2l).

Plain Ware Sherds

The 578 plain ware sherds include 14 rims, 554 body sherds, and 10 base sherds. While many of the plain sherds in the ALCOA #1 assemblage

are undoubtedly from the undecorated portions of decorated fine ware and utility ware vessels, the proportion of plain rims among all the rims in the assemblage (25.4%) and the ratio of plain to decorated rims (1:2.9) indicates that plain vessels (probably bowls, carinated bowls, and an occasional bottle, see Appendix 1) comprise a substantial part of the vessels made and used by the Caddo during the occupation.

Assemblage Characterization of the Vessel Sherds

In this section, I discuss the character of the ALCOA #1 vessel sherd assemblage with respect to the use of different kinds of temper and the apparent use of a naturally sandy clay for vessel manufacture, firing conditions, vessel wall thickness, and rim and lip form. These comparisons provide a good sense of the various technological attributes that characterize prehistoric Caddo pottery manufacture in the upper Neches River basin.

Temper and Paste

The ALCOA #1 ceramic sherds from the plain wares, utility wares, and fine wares are tempered with grog or crushed sherds (Table 4). Between 90.7-93.9% of the sherds from the site have grog temper, which is consistent with other upper Neches River Frankston and Allen phase sites (Perttula 2007:80 and Table 1).

A notable feature of the ALCOA #1 sherd assemblage, however, is the regular use of crushed hematite as a temper, particularly in the plain wares and utility wares (54.4-55.4%), but even abundant in the fine wares (45.4%). Crushed and burned bone was a decidedly secondary choice as a temper additive by Caddo potters at the site, comprising only 2.2-11.4% of the sherds in the three wares. Less than 10% of the sherds have charred organic materials preserved in the paste, and this material is less a deliberate temper than an accidental organic inclusion in the clay paste that was not completely combusted (probably due to a short firing episode) during firing.

Table 4. Temper.

Temper Category	Plain ware	Utility ware	Fine ware
grog	34.2*	40.0	43.4
grog-bone	6.1	0.0	3.8
grog-hematite	45.6	44.4	32.1
grog-hematite-organics	0.9	2.2	1.9
grog-organics	5.3	4.4	5.7
grog-hematite-bone	1.8	2.2	1.9
bone-grog	0.0	0.0	1.9
bone-hematite	3.5	1.5	1.9
bone-hematite-organics	0.0	0.7	0.0
hematite	2.6	4.4	5.7
hematite-organics	0.0	0.0	1.9
% grog	93.9	93.2	90.7
% bone	11.4	2.2	9.5
% hematite	54.4	55.4	45.4
% organics	6.2	7.3	9.5
% Sandy paste	8.8	23.7	11.3
Totals	114	135	53

*percentage

The addition of coarse fragments of crushed hematite and bone, either separately or together, found in 54.9-65.8% of the sherds (see Table 4), would have made the clay selected for vessel manufacture more plastic and increased its strength and use-life. These were properties that were important in the successful manufacture of durable pottery vessels, along with the use of grog. The selection of grog—sometimes finely crushed—as the primary temper by the Frankston phase potters may have been for both technological and stylistic properties. The addition of grog in the paste would slow the oxidation process, creating darker-colored vessels in reducing environments, while allowing them to be fired longer, with more control, and producing a harder ceramic (Rice 1987:354; Teltser 1993:532, 540). Furthermore, because grog would have comparable expansion coefficients to that of the clay paste, this would contribute to the ability of a fired vessel to withstand heat-related stresses, increase its flexural strength (O'Brien et al. 1994:281; Rice 1987:362), and have better thermal conductivity.

Sherds with a sandy paste account for between 8.8% and 23.7% of the ALCOA #1 sherds (see Table 4). Most of these are among the utility ware sherds (23.7%), with lesser but comparable amounts among the plain wares and fine wares (8.8-11.3%). It is likely that these differences are apparent because Caddo potters recognized that sandy clays held up better to heat-related stresses and helped with vessel porosity and thermal conductivity, all beneficial in vessels designed to receive repeated use for cooking and heating foods and liquids, such as the utility ware cooking jars, while vessels designed for different purposes (i.e., the plain wares and fine wares) have different paste compositions (see Rice 1996:139).

Firing

The Caddo vessel sherds from the ALCOA #1 site were fired under a variety of conditions (Table 5), primarily in a reducing or low oxygen environment, probably because of the smothering of the vessel in a bed of coals from a wood fire. This method of firing is typical of Caddo ceramic assemblages throughout East Texas. After firing, most of the vessels were apparently cooled in a high oxygen environment (especially the plain wares and the fine wares), meaning that the fire-hardened vessels were probably removed from the fire to cool, producing a thin oxidized or lighter surface on either one (i.e., firing conditions G and H) or both (i.e., firing condi-

tion F) vessel surfaces.

About 69% of the fine wares were fired in a reducing environment, compared to 48.1-55.7% in the utility wares and plain wares, respectively (see Table 5). The fine ware vessel sherds are from vessels that were better made and better fired (in terms of regulating the firing temperature), as well as probably fired longer in a low oxygen environment. This produced fine ware vessels that were harder and more durable than the other two ceramic wares from the site.

Between 30.8-45.2% of the vessel sherds are from vessels that were fired in either a high oxygen environment or they were not completely oxidized during firing; the highest proportion of sherds fired in this manner occur among the utility wares (see Table 5). In the latter case, this probably represents a situation where it was not necessary, provided that their porosity was not excessive, for utility vessels to be fired for as long a time as the harder fine wares, but still remained serviceable over time without being subject to diminished strength from cumulative thermal fatigue as well as cracks and fractures.

There are significant differences in how utility wares and fine ware vessels were fired at the ALCOA #1 site, with the plain wares intermediate in firing conditions, indicating its more diverse formal and functional character. Nevertheless, the relative consistency in how the vessels at the ALCOA #1 site were fired indicates that the Caddo potters who made those vessels were well-versed in regulating firing and cooling temperatures as well as maintaining control over the final finished end product, namely the manufacture of durable and relatively hard vessels with different forms and functions.

Vessel Wall Thickness

The fine ware vessel sherds from the ALCOA #1 site are thinner than the decorated utility ware or plain ware sherds, particularly along the rim (Table 6). These variations in vessel wall thickness are likely related to functional and technological differences in how these different wares were intended to be used by Caddo potters. The more substantial vessel walls in the utility wares would be well suited to the cooking and heating of foods and liquids and would have contributed to their ability to withstand heat-related stresses. Fine wares were probably intended for use in the serving of foods and liquids, while the plain wares were probably used for both cooking and food serving.

Table 5. Firing Conditions.

Firing Condition	Plain ware	Utility ware	Fine ware
A	21.2*	25.9	17.3
B	11.5	11.1	13.5
C	8.8	5.2	13.5
D	2.7	0.7	0.0
E	8.8	13.4	0.0
F	22.1	14.8	34.6
G	15.9	14.1	9.6
H	6.2	8.1	11.5
I	0.0	2.2	0.0
J	0.0	0.7	0.0
K	2.7	3.7	0.0
Oxidizing	21.2	25.9	17.3
Incompletely Oxidized	20.3	19.3	13.5
Reducing	11.5	11.1	13.5
Reducing, cooled in the open air	44.2	37.0	55.7
Possible smudged or refired	2.7	6.6	0.0
Totals	113	135	52

*percentage

Another factor that would influence vessel body wall thickness would be the sequence in which a vessel was constructed (Krause 2007:35). Vessels constructed from the bottom up, as these Late Caddo Frankston phase vessels likely were, would tend to have thinner walls moving up the vessel body towards the rim, with the lower portion of the vessel—especially the base—usually significantly thicker than the upper portions of the vessel.

Rim and Lip Forms

The plain ware vessels primarily have direct or vertical rims and rounded lip (Table 7), with an occasional vessel (probably a plain carinated bowl) having a rounded and exterior folded lip. Utility

wares, almost all from wide-mouthed jars, have both direct and everted rims, with proportionally more of the latter, with rounded and flat lips.

Rims of the fine ware vessels from the ALCOA #1 site are almost exclusively direct or vertical in orientation (see Table 7), with the exception of a single inverted rim vessel; inverted rim fine ware vessels are present in both Frankston phase and later Allen phase ceramic assemblages in the upper Neches River basin (cf. Suhm and Jelks 1962). Lips on fine wares are proportionally more common to be either flat (as seen in bottles and some bowl forms) or rounded and exterior folded (as noted on carinated bowls).

Only a few rims were large enough, or had sufficient curvature, to measure their orifice diameter.

Table 6. Mean Vessel wall thickness.

Ware	Rim (in mm)	Body (in mm)	Base (in mm)
Plain ware	7.26	7.04	10.50
Utility ware	7.28	7.42	—
Fine ware	6.16	6.54	

Table 7. Rim and lip forms in the ceramic assemblage from the ALCOA #1 site.

Rim and Lip form	Plain ware	Utility ware	Fine ware	N
Direct rim	16.1*	38.7	45.2	31
Everted rim	12.5	87.5		8
Inverted rim	—	—	100.0	1
Rounded lip	17.9	57.1	25.0	28
Rounded, exterior folded lip	20.0	40.0	40.0	10
Flat lip	12.5	50.0	37.5	8
Flat, exterior folded lip	—	—	100.0	1
Total percentage	17.0	51.1	31.9	47

*percentage of analyzed rims

The fine wares range from 16-32 cm in orifice diameter, with a mean of 22.8 cm, indicating that large fine ware vessels were in use at the ALCOA #1 site. Utility ware vessels have a similar range in orifice diameter (18-30 cm), with a mean orifice diameter of 22.9 cm. None of the plain ware rim sherds could be measured for orifice diameter.

Pipe Sherds

The seven clay pipe sherds (see Table 2) are from at least five different Late Caddo style elbow pipes with short and rounded stems as well as squat but broad bowls. Orifice diameters on two of the pipes range from 3.0-4.0 cm. One of the elbow pipes has a row of tool punctations below the lip of the bowl, while the other pipe sherds are undecorated.

Bowl rims are direct to inverted in profile, with either rounded (n=1) or flat (n=2) lips. The pipes are tempered with grog (57%), bone-hematite (14%), bone (14%), and grog-bone (14%). The pipes are commonly smoothed or burnished on their exterior surfaces, although none of them are slipped. More than 70% of the pipe sherds are from pipes

that have been fired in a reducing environment, but then cooled in the open air. The varying thickness of the pipe bowls (ranging from 1.8-7.4 mm) from the ALCOA #1 site indicate that the elbow pipes were made in at least three sizes, the first with a thin-walled bowl (1.8 mm), another with a large and thick-walled bowl (7.4 mm), and an intermediate but more common group with a mean bowl thickness of 3.84 ± 0.46 mm.

SUMMARY

Prehistoric Frankston phase Caddo ceramic vessel sherds and pipe sherds dating to the early 15th century A.D. are abundant at the ALCOA #1 site in the upper Neches River basin. These remains, comprising the fragments of whole vessels and ceramic pipes used either for the producing, storage, preparing, serving, consuming, and disposal of foods or—in the case of the clay pipes—the consumption of smoking products. Based on the archaeological context of the recovered vessel and pipe sherds, these remains were discarded at a small habitation site, probably that of

one or two households, that most likely was not occupied for more than 1-2 generations. As such, the ceramic vessel and pipe sherd assemblage from the ALCOA #1 site provide a glimpse of this aspect of the material culture of a small group of Caddo families living along Mound Prairie Creek.

The ceramic vessel sherds from the ALCOA #1 site fall readily into three distinct wares: plain wares, decorated utility wares, and decorated fine wares. Based on the proportion of rim sherds for each of the wares, utility ware vessels used for cooking/food preparation and storage comprise 47% of the vessels used at the site, followed by fine wares (27%) and plain wares (25%); the fine wares and plain wares (including bottles and carinated bowls) were used primarily for food serving and the containment of liquids. When compared, each ware is slightly different in temper and paste composition from the other, although grog and hematite were the principal tempers (much like other upper Neches River Caddo households, at least in the case of the use of grog temper), firing conditions, rim and lip form, and vessel wall thickness. These differences appear to be related to the different forms and functions of the three wares made and used at the site.

The Frankston phase utility ware ceramic sherds are from vessels that were most commonly decorated on the rim with (a) diagonal or opposed incised lines (Maydelle Incised, see Suhm and Jelks 1962:Plate 52), (b) rows of tool or fingernail punctates (see Suhm and Jelks 1962:Plate 79a-b), or (c) horizontal or vertical brushing marks (Bullard Brushed, see Suhm and Jelks 1962:Plate 11). These vessels—probably cooking jars for the most part—tend to have vertical brushing marks on the vessel bodies, regardless of the rim decorative treatment.

Fine wares from the ALCOA #1 site, on the other hand, are from bottles and carinated bowls decorated with engraved motifs; a small percentage of these motifs have had a red clay pigment rubbed in the engraved lines. The fine ware sherds are from Poynor Engraved vessels (see Suhm and Jelks 1962:Plates 62 and 63), the principal Frankston phase fine ware type in the upper Neches River basin. These vessels have been well burnished or polished, and the local clays along Mound Prairie Creek that were used turned a rich chocolate brown color when fired in a reducing environment and then allowed to cool in the open air; Frankston phase vessels made from clays available along the Neches River typically turned a reddish-yellow or reddish-brown hue when fired.

In a few cases, it was possible to identify specific varieties of Poynor Engraved in the ALCOA #1 site fine wares. This includes examples of Poynor Engraved, *var. Hood* (n=3) and *var. Lang* (n=4) rim sherds. Given the 15th century A.D. age of the site, it is possible to speculate that these are early varieties of Poynor Engraved, or at least were distinct stylistic varieties of Poynor Engraved that began to be used in the 15th century A.D. Additional radiocarbon dates from the site may clarify the age of these Poynor Engraved varieties, as will radiocarbon dates and the completion of detailed ceramic stylistic analyses from other Frankston phase Caddo sites in the upper Neches River basin.

All of the pipe sherds are from elbow pipes. Their frequency at the ALCOA #1 site suggests that family or community-wide traditions and rituals involving pipes and the smoking of tobacco and other types of plants were alive and well in this particular Caddo household or households. These traditions and rituals were shared with other Caddo families and households across the upper Neches River basin, based on close stylistic and technological similarities in the form, manufacture, and decoration of the clay elbow pipes.

ACKNOWLEDGMENTS

I would like to thank Dr. James Bruseth and Maureen Brown of the Archeology Division at the Texas Historical Commission for facilitating the study of the 41AN87 ceramic sherds.

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APPENDIX 1, DETAILED ANALYSIS OF DECORATED AND PLAIN SHERDS

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
Plain wares							
Unit 1, lv. 1	rim	g	—	A	6.6	—	—RO
	body	g-h	I SM	B	6.5	—	
	body	g-h	I/E SM	E	6.7	—	
	body	g	E SM	B	7.6	—	
	body	g-b	I/E SM	A	7.7	—	
	body	g-h	I/E SM	A	4.8	—	
	body	g	I/E SM	A	7.3	—	
	body	g-h	E SM	A	7.1	—	
	body	g-h	EB/ISM	A	6.0	—	
	body	g-b	I/E SM	C	7.1	—	
	body	g-h	I/E SM	A	6.7	—	
	body	g-h	I/E SM	F	7.2	—	
	body	g-h	I/E SM	A	6.2	—	
	body	g-h	I/E SM	A	7.2	—	
	body	g-h	E B	B	8.4	—	
	body	g-o	E B	F	5.9	—	Bottle
	body	g-o	I/E SM	F	6.3	—	
	body	g-h	I/E SM	A	7.0	—	
	body	g-h/SP	I/E SM	G	6.2	—	
	body	g-h	E SM	G	5.5	—	
	body	g	I/E SM	A	7.5	—	
	body	g	—	A	7.2	—	
Unit 1, lv. 2	body	b-h/SP	I SM	C	7.7	—	
	body	g	I/E B	F	7.1	—	
	body	g/SP	I/E SM	K	7.3	—	
	body	g-h	I/E SM	A	6.7	—	
	body	g	E SM	C	6.2	—	
	body	g	E B	—	—	—	
	body	g-h	E B	H	7.1	—	
	body	g	I/E SM	G	5.1	—	
	body	b-h	I/E SM	H	7.1	—	
	body	g/SP	I/E SM	F	6.2	—	
	body	h/SP	I/E SM	K	5.3	—	
	body	g	I/E SM	A	5.9	—	
	body	g	I/E SM	B	8.4	—	
	base	g-h/SP	—	D	10.1	—	
Unit 1, lv. 3	body	g-h	EB/ISM	E	6.9	—	
	body	b-g	I/E SM	E	7.6	—	
	body	g	I/E SM	H	8.9	—	
	body	g	I/E B	B	6.9	—	
	body	g-h	I/E SM	A	6.0	—	
	body	g-h	E SM	E	6.8	—	

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
Unit 1, lv. 3	body	g	I/E SM	F	7.9	—	
	body	g	I/E B	B	8.0	—	
	body	g	I/E B	B	5.8	—	
	body	g-b	EB/ISM	F	6.5	—	
	body	g-b	I B	G	7.8	—	
	body	g-h	ESM/IB	E	7.4	—	
	body	g	EB/ISM	G	7.1	—	
	body	g-o	I/E SM	F	5.9	—	
Unit 1, lv. 4	rim	g	—	B	7.6	—	D-RO
	rim	g-b	I B	E	6.9	—	D-RO
	body	g-o	I/E B	F	6.7	—	Carinated bowl
	body	h	I/E SM	C	8.4		
	body	g-h	I/E SM	A	6.2	—	
	body	g-h	I/E SM	A	6.8	—	
	body	g	E B	G	6.3	—	
	body	g	I/E SM	G	7.7	—	
	body	g-h	E SM	A	8.0	—	
	body	g-h	IB/ESM	C	6.9	—	
	body	g-h	I/E B	E	5.8	—	
	body	g-h	I SM	F	8.3	—	
	body	b-h	I/E SM	F	8.3	—	
	body	g-h	EB/ISM	A	7.5	—	
	body	g-h	I/E B	B	9.5	—	
	base	g-h/SP	I SM	A	10.0	—	
	base	g	E SM	G	9.9	—	
	base	g	I SM	B	11.3	—	
Unit 1, lv. 5	rim	g-b	—	B	8.8	—	
	body	g-h-o	I SM	H	9.6	—	
	body	g-b-h	E SM	F	6.3	—	
	body	g-h	EB/ISM	C	7.5	—	
	body	g-h	I/E B	G	5.6	—	
	body	g-h	I/E SM	D	6.8	—	
	body	g	E SM	H	8.3	—	
	body	g-h	EB/ISM	C	8.9	—	
	body	g-h	—	B	6.2	—	
	body	g	I/E B	G	5.6		
	body	g-h	EB/ISM	C	8.6	—	
	body	h	EB/ISM	A	7.4	—	
	body	g-b-h	I/E B	F	6.2	—	
	body	g-h	I SM	A	7.4		
Unit 1, lv. 6	rim	g	I/E B	F	7.5	—	D-RO
	rim	g		A	7.1	—	-RO, ext f
	body	g-o	I/E B	F	6.0	—	
	body	g-h	I/E B	F	6.3	—	

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
Unit 1, lv. 6	body	g	E B	F	6.5	—	Bottle
	body	g/SP	E B	F	6.2	—	
	body	g-h	E B	F	6.6	—	
	body	g	I/E SM	B	7.4	—	pinkware Bottle
	body	g-h	I/E SM	F	7.9	—	
	body	g-h/SP	I/E SM	F	8.6	—	
	body	g-h	EB/ISM	F	7.5	—	Bottle
	body	g	I SM	G	8.4	—	
	body	g	E B	G	5.4	—	
	body	g-h	I/E SM	A	8.0	—	Bottle
	body	b-h/SP	E SM	G	8.4	—	
	body	g-h	I/E B	G	7.1	—	
	body	g-h	E B	C	6.7	—	Bottle
	body	g-h	I/E SM	F	6.7	—	
	body	g	EB/ISM	G	6.5	—	
	body	g	E B	G	6.5	—	Bottle
	body	g-o	E B	H	7.0	—	
	body	g-h	E B	F	5.9	—	
	body	g	I SM	E	6.7	—	Bottle
	base	g-h	E SM	E	12.0	—	
	base	g-h	I SM	D	9.7	—	
Unit 1, lv. 7	rim	g-h	I/E B	G	7.1	—	D-RO, ext f
	body	g-h	I/E SM	E	8.9	—	
	body	g-h	IB/ESM	G	8.6	—	
	body	g	I/E SM	F	8.5	—	
	body	g	I/E B	K	5.7	—	

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
Utility wares							
Unit 1, lv. 1	rim	g-h/SP	I SM	A	5.0	vertical and diagonal incised lines	—RO, ext f
	body	g	I SM	G	7.0	parallel brushed and overlapping incised lines	
	body	h/SP	I SM	C	7.2	overlapping brushed	
	body	g-h	I SM	A	6.6	parallel brushed	
	body	g-b-h	I SM	G	8.5	parallel brushed	
	body	g-h	I SM	C	7.0	overlapping brushed	
	body	g	I SM	F	8.3	parallel brushed	
	body	g/SP	I SM	E	8.4	parallel brushed	
	body	g-o	I SM	E	6.0	parallel brushed	
	body	g-h-b	I SM	E	6.6	parallel brushed	
	body	b-h	I SM	A	6.8	parallel brushed	
	body	g-h	I SM	A	6.9	incised-punctated cl.	

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
	body	g-h	I SM	F	7.3	single straight incised line and tool punctated filled zone	
	rim	g	I SM	G	6.5	vertical fingernail punctated	-RO
	body	g/SP	I SM	G	7.5	fingernail punctated rows	
	body	g-h	I SM	A	6.5	tool punctated rows	
	body	g-h/SP	I SM	K	7.5	applied node and ridge	
Unit I, lv. 2	body	g	-	B	5.1	applied node	
	body	g	I SM	H	10.3	parallel brushed	
	body	g-h	I SM	C	6.5	overlapping brushed	
	body	g-h	I B	F	7.6	overlapping brushed	
	body	g	I SM	G	8.4	parallel brushed	
	body	g/SP	I SM	E	8.4	parallel brushed	
	body	g-h	I SM	F	7.9	parallel brushed	
	body	g	I SM	E	8.3	overlapping brushed	int. organic residue
Unit I, lv. 2	body	g-h	I SM	H	9.8	overlapping brushed	
	body	g	I B	K	7.8	parallel brushed	
	rim	g	I SM	F	7.2	diagonal incised lines, closely-spaced	D-FL
	rim	g	I B	E	8.2	Incised el.	EV-RO, 23 cm OD
	body	g	I SM	E	6.5	single straight incised line	
	body	g	I SM	A	6.0	single straight incised line	
	body	g-h	I SM	A	7.3	parallel incised lines, widely-spaced	
	body	g	I SM	C	6.0	incised-punctated el.	
Unit I, lv. 3	body	g	I SM	G	7.6	tool punctated row	
	body	g-h-h	E SM	G	7.7	fingernail punctated row	
	body	g	I/E B	G	8.2	pinched-fingernail punctated	
	body	h	-	A	6.5	4+ linear punctated rows	
	rim	g-h	I SM	J	7.7	vertical tool punctated rows	D-RO
	body	g-h	I SM	F	7.2	tool punctated rows	
	body	g-h/SP	I SM	F	8.8	fingernail punctated rows	
	body	g-h	I SM	A	5.4	linear fingernail punctated rows	
	body	g-o	I SM	G	7.3	3+ linear punctated rows	
	rim	g-o	I SM	B	7.0	incised rim and pinched strap handle	EV-RO, 24 cm OD
	rim	g	I SM	G	5.8	incised-punctated el.	EV-RO, ext f
	rim	g-h	-	B	8.9	diagonal incised lines	EV-FL

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
	body	g	I SM	F	8.6	2+ curvilinear incised lines	
	body	g-h	I SM	E	7.2	opposed incised lines	
	body	g-h/SP	I SM	A	7.7	parallel incised lines, widely-spaced	
	rim	h	I SM	A	6.8	vertical brushed	EV-RO
	body	g	I SM	F	7.3	parallel brushed	
	body	g	I SM	E	8.1	parallel brushed	
	body	g/SP	I SM	B	6.5	parallel brushed	
	body	g-h/SP	I SM	C	7.5	parallel brushed	
	body	g-h	I SM	I	7.4	parallel brushed	
	body	g-h/SP	I SM	E	8.4	overlapping brushed	
	body	g	—	F	6.5	overlapping brushed	
	body	g	I SM	A	6.5	tool punctated row above vertical brushing	
Unit 1, lv. 4	body	g-h	I SM	F	6.3	incised-fingernail punctated el.	
	body	h	I/E SM	A	6.3	fingernail punctated row	
	body	g-h	I SM	B	7.7	large fingernail punctate	
	body	g-h/SP	I SM	F	7.3	large fingernail punctates in rows	
	rim	g-h	I B	B	6.6	cross-hatched incised	D-FL
	rim	g	I SM	B	6.2	diagonal incised line	D-RO
	body	g-h	I B	I	8.0	single straight incised line	
Unit 1, lv. 4	body	b-h	I SM	A	5.9	incised el.	
	body	g-h	I SM	E	7.1	parallel incised, widely- spaced	
	body	g	I SM	G	6.3	parallel incised, widely- spaced	
	body	g-h	I B	E	7.3	parallel brushed	
	body	g	I B	I	7.2	parallel brushed	
	body	g-h	I SM	H	7.3	parallel brushed	
	body	g-h	I SM	C	7.6	parallel brushed	
	body	g-h	I SM	G	9.9	overlapping brushed- straight incised line- fingernail punctates through brushing	
Unit 1, lv. 5	body	g-h	I SM	B	7.9	parallel brushed	
	body	g	I SM	G	6.8	parallel brushed	
	body	g-h-o	I SM	F	7.0	parallel brushed	
	body	g-h-o	—	F	8.8	opposed brushed	
	body	g/SP	I B	A	8.0	overlapping brushed	
	body	g-h	—	E	7.4	overlapping brushed	
	rim	g-h	I SM	A	7.8	vertical brushed-incised	D-RO, 18 cm OD

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
Unit 1, lv. 5	rim	g-h	I SM	A	7.3	horizontal brushed	D-RO, 14+ cm OD
	rim	g-h	—	D	5.3	single horizontal incised line	—RO
	rim	g	I SM	K	6.7	diagonal incised lines	D-FL
	rim	g-h	I SM	G	7.5	horizontal and diagonal incised lines	D-RO
	rim	g-h	I SM	B	8.2	diagonal incised lines	EV-RO, 21 cm OD
	body	g-h/SP	I SM	A	8.2	parallel incised lines, widely-spaced	
	body	g	I SM	H	8.6	parallel incised lines, widely-spaced	
	body	g-h	E SM	A	8.2	straight incised line and single tool punctated row	
	rim	g	I B	G	5.0	incised-punctated el.	D-RO, ext f, 10+ cm OD
	body	g	I SM	H	8.6	straight incised line and row of tool punctates	
	body	g	I SM	H	8.1	finger nail punctated row	
	body	g/SP	—	E	6.0	finger nail punctated rows	
	body	g-h/SP	—	A	8.9	2+ tool punctated rows	
	body	g	I SM	A	7.0	2+ finger nail punctated rows	
	body	g-o	I SM	H	9.9	widely spaced tool punctated rows	
	body	g-h	E SM	A	6.7	straight applied ridge	
	body	h-g	I SM	E	5.2	applied el.	
	body	g-h	I SM	A	6.5	finger nail punctated rows adjacent to applied ridge	
	body	g/SP	I SM	H	8.4	finger nail punctated rows adjacent to 2+ applied nodes	
	body	g-h/SP	I SM	A	8.0	diagonal incised with broad applied ridge with 3+ applied nodes	
Unit 1, lv. 6	rim	g-h	I SM	F	9.6	horizontal brushed	D-RO, 21+ cm OD
	body	g/SP	—	G	7.0	parallel brushed	
	body	g-h/SP	I SM	F	9.2	parallel brushed	
	body	h	I SM	A	6.7	parallel brushed	
	body	g	—	E	6.5	parallel brushed	
	body	g-h	I SM	A	8.1	parallel brushed	
	body	g-h/SP	I SM	H	7.2	parallel brushed	
	body	g/SP	—	A	8.8	parallel brushed	
Unit 1, lv. 6	body	g-h	I SM	A	7.6	overlapping brushed	
	body	g-h	I SM	E	8.9	overlapping brushed	

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
Unit 1, lv. 6	body	g-h	I B	A	6.4	parallel brushed overlapping straight incised line	
	body	g/SP	I SM	G	8.9	parallel brushed-incised	
	body	g	I B	B	3.9	pinched-diagonal brushed	
	rim	g/SP	I SM	G	5.6	diagonal incised lines, widely-spaced	D-RO, 14+ cm OD
	rim	g-h	I SM	A	7.3	single diagonal incised line	EV-RO, 30 cm OD
	body	h-b-o/SP	I SM	H	7.0	diagonal incised line	
	body	g-o	I SM	F	8.1	opposed incised lines, broad lines	
	rim	g/SP	I SM	B	6.6	incised-punctated el.	
	body	g	I SM	B	5.3	curvilinear incised-punctated el.	
	rim	g-h	I SM	H	8.9	fingernail punctated panels	EV-RO, 22 cm OD
	body	g/SP	—	F	6.6	tool punctated rows	
	body	g	I B	B	8.0	fingernail punctated rows	
	handle	g-h/SP	—	A	12.2	3 vertical applied ridges	
	body	g-o	I B	B	4.2	applied node and tool punctated row	
Unit 1, lv. 7	body	g	I SM	A	6.5	parallel brushed	
	body	g/SP	I SM	K	6.6	parallel brushed	
	body	g	I B	G	7.7	overlapping brushed	
	body	g-h	I SM	C	6.6	parallel brushed	
	body	g-h/SP	I SM	A	7.2	parallel brushed	
	body	g-h	I SM	A	8.7	overlapping brushed	
	body	g	I SM	K	8.2	overlapping brushed	
	rim (3)	g-h-o	I SM	E	8.5	fingernail punctated panels	EV-RO, ext f, 22 cm OD
	body	g-h-o	I SM	E	9.1	fingernail punctated panels	
	body	g	E SM	F	6.2	3+ fingernail punctated rows	
	body	g-h	I SM	F	8.9	parallel broad incised lines	
	body	g/SP	—	A	8.4	single straight incised line	
	body	h	I SM	B	7.4	7+ straight incised lines, closely-spaced	
Fine wares							
Unit 1, lv. 1	rim	g	E B	B	6.0	Poynor Engraved, <i>var. Hood</i>	D-RO, ext f
	rim	g	E SM	C	4.4	single horizontal engraved line	D-RO
	rim	g	I/E B	H	7.7	horizontal, vertical, and diagonal engraved lines	D-RO

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
	body	b-g	I/E SM	F	8.4	3+ curvilinear engraved lines	
	body	g-h	—	A	6.3	single straight engraved line	Bottle
	body	g	I/E SM	H	6.2	opposed engraved lines	
	body	g	E SM	F	7.4	hatched engraved triangle	red pigment
	body	h	E B	A	5.9	horizontal and vertical engraved lines	Bottle
	body	g-h	I/E B	B	5.4	opposed engraved lines	
Unit 1, lv. 2	rim	g	I/E SM	A	5.2	Poynor Engraved el.	D-RO, rim peaks
	body	g-h	E B	G	5.4	3+ curvilinear engraved lines, closely-spaced	Bottle
	body	g/SP	I/E SM	F	4.9	engraved el.	red pigment
	body	g-h	I/E SM	A	4.0	2+ parallel engraved lines, closely-spaced	
	body	g	I/E SM	H	7.0	single straight engraved line	
	body	g-h	EB/ISM	F	6.3	Poynor Engraved el.	Carinated bowl
	body	g-h	E B	A	4.3	engraved-punctated el.	Bottle
Unit 1, lv. 3	rim	g-h-o	I/E B	F	6.8	Poynor Engraved el.	D-RO, ext f, 32 cm OD, Carinated bowl
	rim	g	I/E B	F	5.0	Poynor Engraved el.	
	body	g-h	E SM	C	6.0	closely-spaced opposed engraved lines, Poynor Engraved	Bottle
	body	g-h	I/E B	F	8.4	opposed engraved lines, Poynor Engraved	
	body	g-h	EB/ISM	F	6.6	opposed engraved lines, Poynor Engraved el.	Carinated bowl
	body	g-h	I/E B	F	7.0	Poynor Engraved el.	Carinated bowl
	body	g	E SM	G	5.7	hatched engraved circle, cf. Poynor Engraved	
Unit 1, lv. 4	rim	g-h	I/E B	F	6.2	engraved-punctated el. Poynor Engraved	D-FL, 24 cm OD
	rim	g	I/E B	C	5.2	horizontal and diagonal engraved lines	D-FL
	rim	g-h	E SM	A	5.2	single broad engraved line under lip	D-FL
	rim	g	I/E B	B	5.5	3+ horizontal engraved lines, closely-spaced	INV-RO, 19 cm OD
	rim	g-h/SP	E B	H	6.5	Poynor Engraved el.	D-RO

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
	body	g	E B	B	6.2	2+ parallel engraved lines, closely-spaced	
	body	g-b	I/E SM	A	9.6	opposed engraved lines, Poynor Engraved	
	body	g	E SM	A	7.0	opposed engraved lines	
	body	g	I/E B	F	6.2	single straight engraved line	
	body	g-h	EB/ISM	C	5.5	parallel engraved lines, closely-spaced	
Unit 1, lv. 5	rim	g	EB/ISM	B	9.1	Poynor Engraved el.	D-RO, ext f, 16+ cm OD
	rim	g-h	EB/ISM	C	5.8	multiple diagonal engraved lines, closely-spaced	D-RO, ext f
	rim	g	I/E B	F	5.4	3+ horizontal engraved lines	D-RO
	body	g-o	E B	F	7.9	hatched engraved triangles, Poynor Engraved	Carinated bowl
	body	g-h-b	EB/ISM	F	6.6	hatched engraved triangles, Poynor Engraved	Carinated bowl
	body	g-o	E B	G	6.4	horizontal and diagonal engraved lines	Bottle
	body	h/SP	I/E SM	C	6.4	single horizontal engraved line	Carinated bowl
	body	h-o	I/E SM	H	6.8	Poynor Engraved el.	
	body	g	E B	B	6.5	3+ straight engraved lines, closely-spaced	Bottle
	body	g/SP	E B	G	5.4	2+ straight engraved lines, closely-spaced	Bottle, red pigment
	body	g-h	EB/ISM	F	6.5	single horizontal engraved line	Carinated bowl
Unit 1, lv. 6	rim	g-o	I/E B	F	8.9	Poynor Engraved, <i>var. Hood</i>	D-FL, ext f
	body	g-b	I/E B	B	7.2	single straight engraved line	Carinated bowl
	body	g/SP	—	C	8.9	single straight engraved line	Carinated bowl
	body	g-h	I/E B	F	7.1	parallel engraved lines, closely-spaced	Carinated bowl
	body	g	E B	G	7.1	hatched engraved triangle, cf. Poynor Engraved	
	body	h	EB/ISM	A	7.4	curvilinear engraved lines, Poynor Engraved	Carinated bowl

Provenience	Sherd	Temper	ST*	FC	Th	Decoration	Comments
	body	g/SP	I/E B	F	5.4	engraved circle with punctates. Poynor Engraved, <i>var. Lang</i>	red pigment
Unit 1, lv. 7	rim	g	I/E B	H	5.6	2+ horizontal engraved lines under the lip	red pigment
	body	b-h	E B	—	—	single straight engraved line	

*ST=surface treatment; I/E=interior/exterior; SM=smoothed; B=burnished

FC=firing condition (see Teltser 1993:Figure 2; Perttula 2005:Figure 5-30).

Th=thickness, in mm

D=direct rim; EV=everted; INV=inverted; RO=rounded lip; FL=flat lip; ext f=exterior folded lip

OD=orifice diameter

g=grog; h=hematite; b=bone; o=charred organic material; SP=sandy paste