

HUMAN BURIALS

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ABSTRACT

During the course of mechanical trenching at the ARCO Refinery in Carson, California, human remains were exposed. It is estimated that some 50 individuals are represented. Within the group are a full age range from infancy to adult. Both genders are represented. Although many of the skeletons were severely impacted by the trenching and earlier excavation, at least 27 were sufficiently intact to permit careful hand excavation. It would appear that there were two distinct burial episodes: the lower grouping, in which the individuals were carefully laid out, sometimes still holding burial items; and an upper grouping in which individuals appear to have been interred hastily in random positions and directions. Recovered artifacts suggest a Protohistoric time frame with prehistoric items predominating, but with some glass beads and other historic items present.

INTRODUCTION

This paper provides a preliminary descriptive and interpretative summary of human remains recovered from LAn-2682 (the ARCO Site) located in Carson, Los Angeles County, California (Figure 1). The principal objectives of this study are to determine demographic elements about the prehistoric population of southwestern Los Angeles County based on osteological evidence.

Taphonomic factors significantly affect the preservation of bone specimens that are ultimately available for examination by the researcher. Burial practices can disturb previous interments, as does rodent burrowing. Soil pH can greatly alter or destroy many smaller bone or bone with less density. Flooding and erosional episodes, as discussed in the last paper, can severely disturb burials. Finally, recovery methods reduce the true sample of bone which can be accounted for in the live population.

THE SITE

LAn-2682, also known as the ARCO Site, was first discovered in September, 1998, during

subsurface excavation for replacement of existing underground utility lines. Prior to the archaeological investigation, an estimated 300 cubic meters of soil were mechanically excavated. This was placed in metal containers which were moved to Area 503 within the confines of the refinery property.

Once human bones were observed by construction workers, trenching was halted until a full assessment could be made by the Los Angeles County Coroner and a representative of the Native American community. Archaeologists were called in the following day. Six weeks of near non-stop hand excavation was required to remove the remaining human burials and midden soils that were scheduled to be impacted by further construction activity. Hand excavated midden amounted to less than thirty cubic meters of soil. Native American monitors participated in both the hand excavation of the remaining *in situ* interments and with screening of the 503 soils.

In early November, additional trenching was initiated. This was performed under the supervision of Native American and archaeological monitors. Human bone was exposed with the first scrape of the backhoe bucket, halting

construction for a second time. Hand excavation over the next two days removed three additional burials. Once these were removed, the construction project was resumed. No additional human remains were recovered.

While hand excavation was being performed at the site, the mechanically excavated soil was dry screened through 1/8 mesh in order to recover all cultural and faunal remains. This procedure took approximately six months to complete. Sorting of material recovered from 503 continues as does complete analysis of the faunal and human remains.

History of the Property

In 1784, Juan José Dominguez was granted some 75,000 acres of land north of San Pedro Bay for his services to the King as a loyal soldier (Figure 2). This grant included what today are the communities of Compton, Gardena, Dominguez Hill, Carson, Redondo Beach, Torrance, Palos Verdes Peninsula, and the San Pedro-Wilmington harbor (Grenier, et al. 1987:18).

When José Dominguez's grand nephew Manuel and his wife Maria died in 1882 and 1883 respectively, Rancho San Pedro was deeded to their six surviving daughters. The second oldest, Dolores Simona, was granted that portion of Rancho San Pedro on which LAn-2682 is located. It was her son, Patrick Watson, who sold a portion of his property to the Pan American Refinery Company in 1923. The refinery was later sold to Richfield Oil, now ARCO (Figure 3).

Patrick Watson constructed a home for his family north of what today is Sepulveda Blvd and west of Alameda Street. In other words, in the southeast corner of the ARCO refinery. It was located on high ground between Compton Creek to the east and Watson Lake to the west.

When the property was sold to Pan American, the Watson house was maintained as the offices for the refinery. A 1927 photograph of the new refinery shows the location of LAn-2682 as open field (Figure 4). However, by 1930, when the USGS 6 minute Compton Quad map was drawn, the general location of LAn-2682 had been covered by structures, roads, and a rail line (Figure

5).

Tradition says that the area of the ARCO site was used as a mule or donkey stable. A photograph taken in 1924 shows a number of mule teams that were used to grade the Watson land for use as a refinery (Figure 6). However, no mule or donkey bones were identified in the faunal remains recovered during the archaeological project.

As was discussed in the last paper, the Watson property experienced a series of widespread floods during the years 1914, 1916, and 1938. These episodes likely were preceded by earlier floods. Apparently the archaeological site had been buried by this time.

Records Check

A records check was performed at the South Central Coastal Information Center (UCLA) in October, 1998. Examination of the available information showed that the ARCO Site had not been recorded, though the ARCO Refinery property had been surveyed (Padon 1992). The general area of LAn-2682 is completely covered with pavement as well as several feet of fill soil and fluvial deposit so it is no surprise that there was no evidence of the site during the 1992 survey.

A village site (LAn-98) was recorded about one mile distance early in this century. Commonly referred to as *Suangna*, salvage excavations were conducted by classes from Cal State Dominguez Hills in the 1970s. A final report was never submitted, though the site became listed on the California Points of Historical Interest. Prior to this, F. H. Racer recorded a site in 1939 on "Struikman's Dairy Ranch" about one mile west of the ARCO Site. He described it as a village site covering several acres of level ground. In some places Racer estimated the midden to be four to five feet deep.

Among the items that Racer recorded were, "Two burials the bones so decayed that it was impossible to remove them." Racer thought one of these to be a medicine man because of the association of three tubular stone pipes, four abrading stones, several "donuts" steatite ear stones, and one large perfect crystal besides

several broken ones. Mortars were also found in association with the burials. Racer may have known about this site as early as 1912 (Padon 1992).

Other light scatters of prehistoric cultural material (LAN-389, LAN-795a and b), have been recorded nearby, but none as impressive as LAN-2682. Minimal subsurface archaeological investigation has been carried out in the San Pedro/South Bay area.

METHODS

Each intact burial was assigned a number before being removed from the site. Evidence of burning, disease, or trauma were noted. Determination of sex was made when possible using the sciatic notch and mandibular arch. Age was determined by tooth eruption and fusion stage of long bone epiphyses. Measurements were taken from fused long bones when possible.

THE BURIALS

Despite historic and natural disturbances, it was possible to distinguish two distinct burial levels: (1) an upper component located between 30 to 110 cm in depth below the present ground surface; and (2) a lower component located at a depth ranging from 139 to 195 centimeters.

It would appear that the upper component was more heavily impacted by the trenching operation than the lower component. The maximum depth of the trench did not go below 138 cm, thereby barely disturbing one or two of the burials in the lower component. In contrast, at least fifteen of the burials in the upper component were impacted to some degree by historic ground disturbance.

Upper Component

The remains of at least twenty individuals were recovered from the upper component through hand excavation. In general, these are poorly articulated, sometimes amounting to bone concentrations from which it is not possible to determine minimum number of individuals.

Included in the upper component are at least ten adult males, four adult females, one infant, one sub-adult, and four adults of undetermined sex. Among the more interesting interments are Burials 3 and 16.

Burial 3: Adult Male

Over the right portion of the face surrounding the eye socket was placed what appears to be a poultice composed of non-organic material similar to ground chloride schist. Lab analysis has not been completed to determine the exact components of this patch. The skull in general shows longitudinal crushing, but this may be the result of post-burial factors rather than evidence of injury. The general condition of the skeleton is poor. The individual most likely expired as a result of the injury.

Burial 16: Adult male

The burial consists of a skull articulated to a complete spinal column and pelvis. Portions of femur are nearby, but not attached. What is most unusual about this burial is the orientation of the spinal column. For some as yet undetermined reason, it has been bent backward with the base of the skull nearly touching the pelvis. The trench did not cut into this burial and the curve of the spinal column is not natural as a post mortem state. The body must have been deliberately placed in this position. The limbs were not removed by trenching. Rodent activity could not have re-oriented the vertebrae into this position. The evidence suggests a pre-mortem cause for this.

Lower Component

At least five adult males one child, and one adult of undetermined sex were recovered in the lower component.

Burial 8: Adult Male

The interment lies in an extended supine position with pelvis rotated west. The face, smeared by trenching is oriented north. A deer tibia wand is in the left hand, and there is ochre on the pelvis and sacrum. No trauma; no cremation.

Burial 9: Adult Male

Semi-flexed burial on left side head facing south. Ochre stain over skull. Ochre placed in front of skull. No signs of trauma; no cremation.

Unprovenienced Human Remains

In addition to the interments found *in situ*, over thirty-two thousand human bone fragments were recovered from the mechanically excavated soils. Virtually every part of the human skeleton is represented in the collection. None of the larger bones, such as long bones, scapulae, pelvi, crania, or ribs were recovered intact. Hundreds of loose, adult teeth were found in the screens. Many of the recovered elements are undoubtedly associated with the hand excavated burials since at least 16 of these were impacted to some degree by the trenching procedure. An exact count is not possible due to the fragmentation and mixing of the specimens. It would be safe to state, however, that at least an additional twenty-seven individuals are represented, and that they were associated with the upper component.

Disease and Trauma

Little disease is noted among the specimens. One exception is a right tibia shaft fragment that shows an open channel similar to one created by tuberculosis. There is no evidence of venereal disease in any of the recovered specimens.

In general, the teeth are free of caries or other forms of dental or gum disease. Teeth are all extensively worn. None of the mandibles show evidence of third molar mal occlusion. One adult (?) maxilla exhibits an incisor that has erupted through the bone just below the nasal cavity.

As described earlier, Burial 16 exhibits a contorted spinal column. This is related to unnatural causes rather than osteological spinal degradation. None of the individuals appear to have advanced to an age where osteoporosis had become pronounced.

Burial 15 may show evidence of trauma. Hands are missing, not by trenching. Sternum missing, while the front of mandible is fractured. Incisors appear to have been pulled out. Upper part of right humerus also are missing.

No finite signs of trauma on any of the bones definitely caused by European weapons (i.e. bullets, sword wounds, etc.).

INTERPRETATION

Burial Practices

A number of burial practices are evident in the interments at the ARCO Site. This includes primary inhumation, cremation, and possible reburial. Bodies were extended, flexed, semi-flexed, sitting, and prone. Some appear to have been thrown down in haste. Like the positions, orientation also appears random, but generally, faces west.

Interments in the lower component appear to be less random and well laid out. In contrast, those in the upper component appear to be in haste, with possible signs of trauma which may have contributed to the demise of the individuals.

Significant and crucial information was lost because of several episodes of historic disturbance, but nevertheless, the information that has been gathered from the ARCO Site and results of tests yet to be conducted will provide invaluable data to reconstruct the culture and burial practices of Gabriolino inhabitants living in the Los Angeles Basin during the Protohistoric Period.

CARBON DATING

Charcoal and shell samples were sent to Beta Analytic in Florida for carbon dating. The results support the theory that there are two distinct burial episodes, the lower component dating between AD 1420 and AD 1620, and an upper component dating between AD 1680 and AD 1810 with a sixty year hiatus between the two levels.

EPILOGUE

When hand excavations were complete in early November, 1998, all visible human remains had been removed to the satisfaction of both the archaeological team and the Native American monitors. However, future excavation may expose additional human burials. It is possible that both burial levels may extend further in any or all directions from the portion that was exposed. Due to Native American concerns, no additional

exploratory excavation was performed. Future subsurface soil disturbance will be subject to full time monitoring by both a Native American monitor and an archaeological team.

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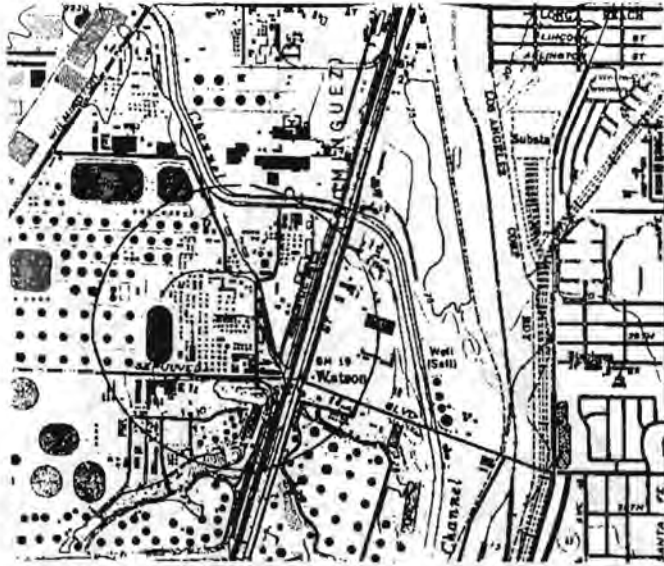


Figure 1. General Location of CA-LAN-2682 (the ARCO SITE). USGS Long Beach, CA (1964 rev. 1981) 7.5 Minute Quad. 1:24,000.

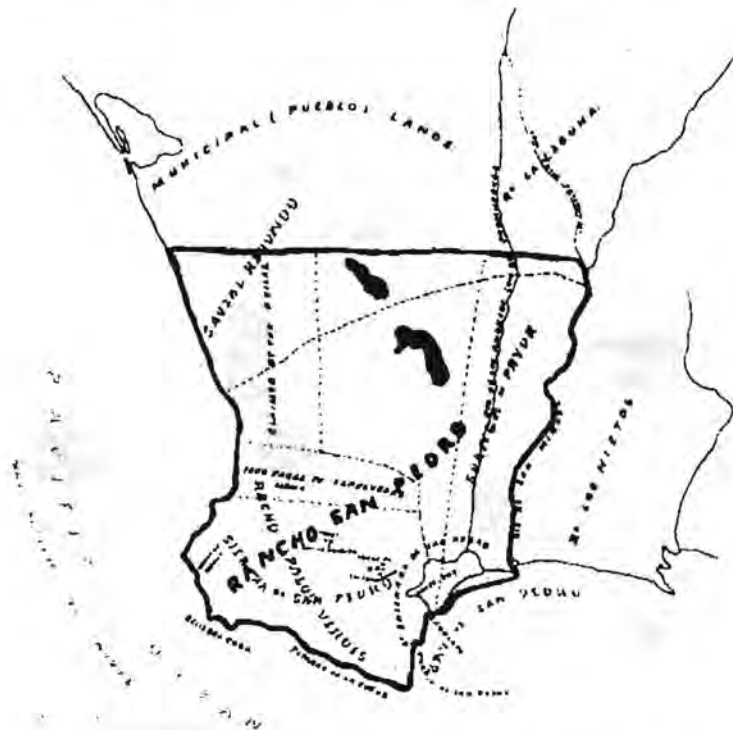


Figure 2. Original 1784 Rancho San Pedro Land Grant (from *Abstract of Title* by Grove and Wilkinson, 1891).



Figure 3. Pan American Refinery in 1923. USGS Compton, CA (1924) 6 Minute Quad. 1:24,000.



Figure 4. Aerial View of Pan American Refinery (1927). Atlantic-Richfield Photo Collection.

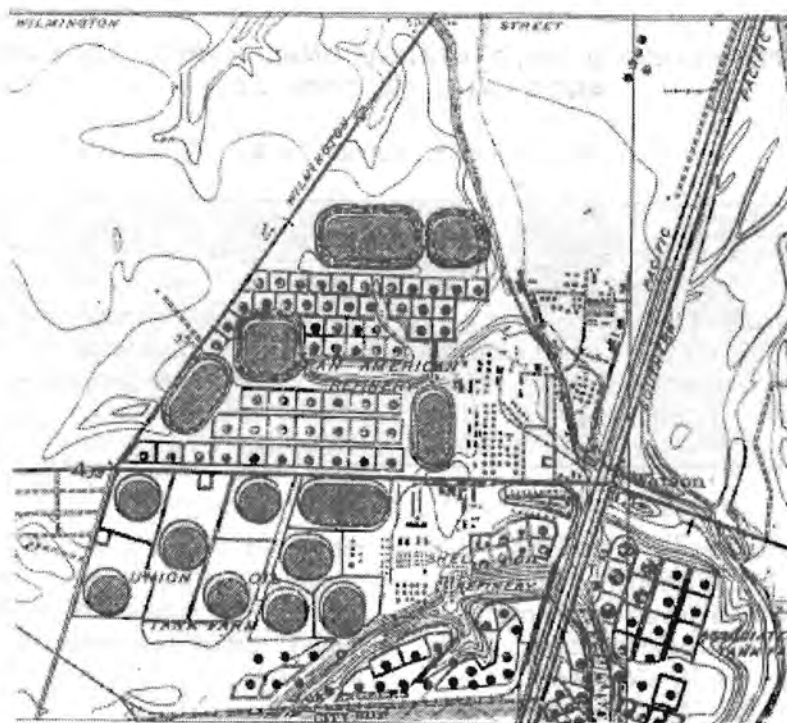
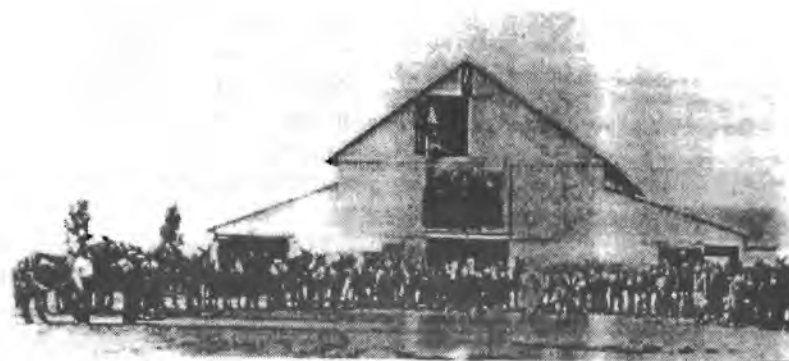


Figure 5. Pan American Refinery in 1930. USGS Compton, CA (1930) 6 Minute Quad. 1:24,000.



Mule teams gather at Patrick Watson's barn to begin leveling land for refinery in 1924.
(Atlantic-Richfield photo)

Figure 6. Mule teams used to level land for Pan American Refinery (1923). Atlantic-Richfield Photo Collection).