

MUSEUM OF NEW MEXICO

OFFICE OF ARCHAEOLOGICAL STUDIES

EXCAVATIONS AT THE OROSCO HOMESTEAD NEAR SAN LORENZO, NEW MEXICO

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ADMINISTRATIVE SUMMARY

Between May 17 and June 14, 1988, a trash pit and structural foundation (LA 65895) were excavated within the area of a proposed realignment of NM 90 at the Mimbres River bridge crossing near San Lorenzo. The original occupants of the structure, which was built in the 1890s, are unknown. It probably served as a temporary shelter while Structure 2, an unexcavated rock structure, was built by homesteader Cayetano Orosco.

Historical documentation indicates that Cayetano Orosco, a Hispanic who came from Chihuahua in 1869, homesteaded on the property in 1898, receiving a patent for the land in 1904. After his death, the family moved to San Lorenzo and the property appears to have been used as a livestock facility until it was sold in 1931.

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INTRODUCTION

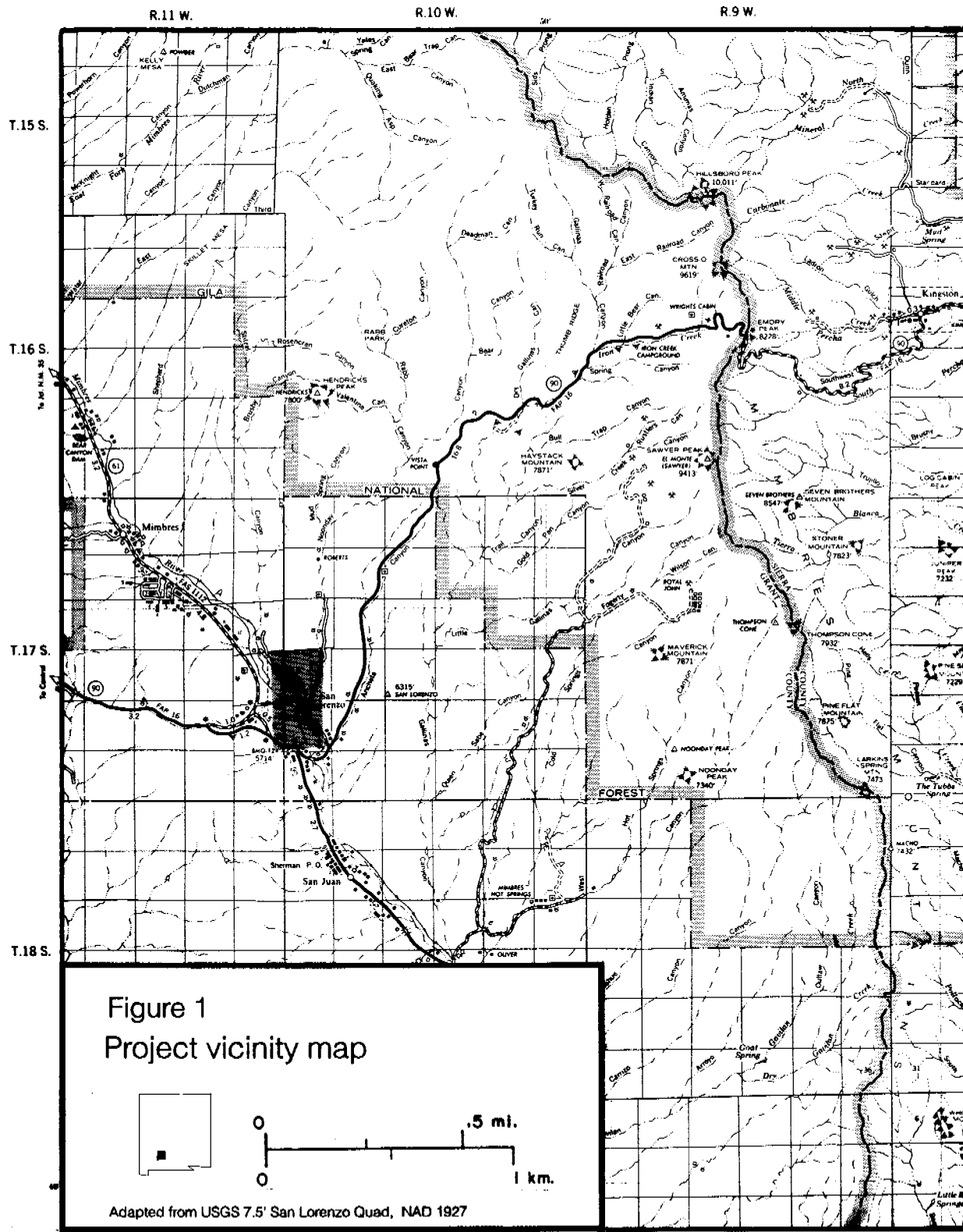
Excavations at LA 65895 were undertaken at the request of the New Mexico State Highway and Transportation Department in conjunction with the proposed realignment of a portion of NM 90 at the Mimbres River bridge crossing. Excavations at LA 65895 were directed by Yvonne R. Oakes assisted by OAS archaeologist Rhonda Main and local workers, Terry Steadkey, Tim Abreau, and Billy Mize. David A. Phillips, Jr. served as the principal investigator. Adisa Willmer analyzed and coded the collected artifacts and coded those analyzed in the field. Ann Noble drafted the figures and Robin Gould edited the manuscript. Yvonne Oakes, Guadalupe Martinez, and other OAS staff members answered my many questions concerning historical artifacts. Their help and patience is greatly appreciated.

The Orosco homestead is approximately 2 km south of the village of San Lorenzo (Fig. 1). It is located on a terrace top and slope 30 m southwest of NM 90 and approximately 213 m west of the Mimbres River, in Grant County. Vegetation on the site is grama and bear grass, narrow leaf yucca, cholla, and wolfberry. In the vicinity are juniper, cottonwood, oak, and other grass species.

LA 65895 was recorded by New Mexico State Highway and Transportation Department archaeologists as a 160-by-80-m area with two structural foundations and three small features of unknown use dating between 1880 and 1920 (Nelson and Marshall 1988). The structure and feature within the right-of-way were investigated by the Office of Archaeological Studies between May 20 and June 14, 1988. The project is located on highway right-of-way acquired from private sources.

The research goals of the project (as defined by Oakes n.d.) focus on when this portion of the Mimbres Valley was settled and by whom (Europeans or Hispanics). More specifically, questions on how the site relates to nearby San Lorenzo, how it relates chronologically to other settlements in the area, why this particular site was settled, how it related to the broader social and economic systems, why the structures were abandoned, and how the artifact assemblage compares to other Territorial period sites excavated by the Office of Archaeological Studies were raised.

This report begins with a description of the prehistoric and historic occupation of this portion of Grant County, the economic climate of Grant County, and a discussion of how public land was dispensed. This is followed by an ownership history of the site, the environmental setting, and an account of the archaeological methods, excavations, and features. The artifact assemblage is then described and compared to other New Mexico sites from the same time period.



BACKGROUND

Prehistoric and Historic Occupation of the Mimbres Valley

Prehistory

The Paleoindian period is generally viewed as an extension of the Great Plains hunting tradition. Clovis remains are sparse throughout the Southwest while Folsom and later materials are concentrated east of the New Mexico-Arizona border (Irwin-Williams 1979:33).

The southern Archaic or Cochise Tradition can be divided into three phases. The earliest, or Sulphur Spring phase, may represent the northern extent of a northwest Mexican hunting and gathering culture that had developed a mixed economy by 7000 to 6000 B.C. The Chiricahua phase, which is relatively distinct from late Archaic in other parts of the Southwest, dates from 3500-3000 to 1500-1000 B.C. or earlier. Remains suggest a mixed foraging economy that was markedly seasonal and concentrated on exploiting valley and hill slope environments. Maize was probably introduced into southwestern New Mexico by 2500 to 2000 B.C. (Irwin-Williams 1979:37-41). The San Pedro phase, 2000 to 100 B.C., is represented by campsites with shallow house floors (Woodbury and Zubrow 1979:55). The appearance of Alma Plain ceramics marks the transition from the Archaic to Mogollon (Stuart and Gauthier 1981:179).

The Mogollon-Mimbres sequence dates from circa A.D. 200 to 1425. The Early Pithouse period, lasting until about A.D. 550, represents the beginning of sedentary horticultural villages in the Mimbres Valley. Sites containing 1 to 80 pit structures are located on knolls, mesas, or ridges. Pottery was plain brown ware, usually jars. Late Pithouse period sites (A.D. 550 to 1000) are found along rivers and tributary drainages and in desert terrain. This expansion seems to reflect population growth accompanied by the appearance of communal structures, a more elaborate material culture, and an increase in trade goods (Anyon and LeBlanc 1984:21-22).

During the Classic Mimbres period, A.D. 1000 to 1150, surface pueblos were built and the population increased by two and a half times. Agriculture was intensified and new sites were founded in marginal desert and mountain areas. Pit structures were replaced by clusters of rooms built of unworked river cobbles set in adobe. Storage rooms, living rooms, semisubterranean kivas, special purpose above-ground rooms, and courtyards are all found. The classic Mimbres Black-on-white ceramics of this period represent one of the most unique aspects of the culture. After A.D. 1150, the population gradually decreased and villages were partially abandoned. Cobble structures and distinctive painted ceramics were no longer made (Anyon and LeBlanc 1984:23).

Postclassic Mimbres period sites have a different material culture. In the Black Mountain phase, A.D. 1150-1180 and 1300, large adobe pueblos with few ceremonial structures, a different ceramic assemblage, and few trade wares are concentrated in the southern portion of the valley. A few smaller sites are found in the middle valley. Cliff phase sites, dating from the late A.D. 1300s, have small adobe walled structures and contain Gila Polychrome ceramics. The valley was abandoned after A.D. 1450 (Anyon and LeBlanc 1984:24-26).

The Apaches

Athapaskan groups were in north-central New Mexico by the early sixteenth century (Gunnerson 1979:162; Sebastian and Larralde 1989:99). According to Schroeder, the Apaches were a peaceful nomadic people until the seventeenth century when drought on the plains brought other Athapaskans and Utoaztecan into the region. This forced the Apaches into the mountains where they developed a raiding pattern in order to survive (Schroeder 1959:x).

Apache presence west of the Rio Grande is documented by the Spanish. In 1583, Antonio de Espejo and his followers were unable to explore the area near Acoma because of "Querechos," probably Chiricahua Apaches. Letters and reports from the late seventeenth century indicate that Apaches were entrenched in the Gila River area and raided into Sonora (Opler 1983:402). There may have been as many as 15,000 Apaches during the Spanish period (Jones 1970:xvii).

Late seventeenth-century Spanish policy toward the Apache was one of retribution. Colonists organized expeditions and attacked Indian camps. Both sides killed adults, occasionally sparing women. Children were taken as slaves. As a result, the entire Southwest became a no-man's land. Concluding that it was easier and cheaper to subsidize the Apaches than to fight, the Spanish changed their attitude (Couchman 1990:16-17). The Apaches were to be watched closely, treated well, furnished with supplies, encouraged to settle near *presidios*, taught to drink intoxicants, and made dependent on the Spanish for their needs (Couchman 1990:17; Ogle 1970:28-29).

Using captured Spanish horses, raids on Spanish and Pueblo villages became more destructive during the eighteenth century, and Spain made a determined effort to control the Apaches. Military expeditions chased the Apaches to their retreats, destroyed their camps, and killed as many as possible. The Apaches eventually signed treaties and lived relatively quietly from 1790 until 1810. In this interlude, mines were opened and ranches were built (Beck 1962:96).

Control of the Apaches broke down during the Mexican war for independence when Spanish troops withdrew from the area and Apache raiding was resumed (Jones 1970:xx). Raiding continued after Mexico gained its independence and control over New Mexico. In 1835 the Sonoran government implemented a policy of extermination, offering bounties for Apache scalps. This policy only intensified the struggle and the Mexicans were unable to control the Apaches (Jones 1970:xx-xxi). Between 1820 and 1835, Apaches reportedly killed 5,000 Mexicans, destroyed 100 settlements, and forced another 4,000 settlers to leave (Couchman 1990:21). On the other side, scalp hunter John James Johnson from Kentucky used cannon to mass execute an Apache band lured by promises of food and trade. Such actions led to retaliation against Americans and Mexicans (Couchman 1990:24; Thrapp 1974:19-20).

The United States annexed Texas in 1845 and acquired much of New Mexico in the Treaty of Guadalupe Hidalgo of 1848. Eager to exploit the mineral wealth of the region, Anglo settlers clashed with Apaches (Opler 1983:403). United States dealings with the Apaches were characterized by disagreement between agencies, changes in policy, and general confusion (Jones 1970:xiii). Apache raids into Mexico caused friction between the United States and Mexico because the Treaty of Guadalupe Hidalgo guaranteed that the U.S. would curtail the Apache raids into Mexico (Jones 1970:xxi-xxii). Apache hatred of Mexicans intensified after 1849 when

Chihuahua reinstated the bounty on Indian scalps (Couchman 1990:66).

The Apaches resented the intrusion of miners, explorers, and travelers into their territory. Anglo settlers demanded the extermination of the Apache. The military wanted to settle and control the Apaches near army posts. Agents of the Indian Bureau wanted to concentrate the Apaches on reservations where they could be isolated from Anglos and taught to farm. While these factions argued about policy, Lieutenant Bascom arrested Cochise, the central Chiricahua Apache leader, and several members of his family for a crime they did not commit. Cochise escaped and captured three Anglo hostages. When Bascom refused to exchange the hostages for the Apache prisoners, Cochise killed the hostages and Bascom hung the Apaches (Beck 1962:192-194).

Raids and retaliatory expeditions against miners, ranchers, settlers, and travelers continued from 1861 through 1865. Arizona miners and settlers feared they would have to leave the area. Civilian military groups were formed and proceeded to kill all Apaches they could find (Jones 1970:xxii-xxiii). In one instance, some Arizonans attacked, raped, and mutilated a peaceful group of mostly women and children settled at a reserve near Camp Grant. More than a hundred were killed (Beck 1962:195; Couchman 1990:186).

Troops were withdrawn from Apache country during the Civil War and the unrestrained Apaches raided settlements. Nearly every town in Arizona was abandoned or destroyed. Mangus Coloradas, leader of the Eastern Chiricahua band of Apaches, attacked Pinos Altos, New Mexico, causing the abandonment of the Mimbres Valley settlements. In 1862 the military reasserted its authority killing Mangus Coloradas and reducing his band to one of the least formidable (Ogle 1970:45-46).

The national perception of New Mexico changed after the Civil War. No longer viewed as barren and worthless, interest turned to solving the "Apache problem" so that mineral exploitation could proceed (Ogle 1970:83). President Grant renounced the treaty system and adopted a reservation policy where Indians would be collected and furnished with necessities. Four reserves were set up for the Apaches and Brigadier General George Crook was assigned the task of hunting down hostile Apaches and placing them on the reserves by February of 1872. General Crook enlisted Apaches as scouts and sought the allegiance of some bands, turning peaceful band against the hostiles and persuading Apache chiefs to control their people both on and off the reservation. By April of 1873 he had largely succeeded in establishing peace in eastern Arizona, by starving, freezing, or fighting hostile Apaches. His success was thwarted by a change in policy that sought to concentrate all Apaches on one reservation. By 1876, miners and settlers forced the Apaches to give up the original reservations. Resistance, except for sporadic Chiricahua Apache outbreaks, was largely ended by 1883 (Jones 1970:xxiv-xxvi).

These sporadic Chiricahua outbreaks were not minor for the residents of Grant County, where General Crook's methods were not appreciated. The *Silver City Enterprise*, April 25, 1884, stated that "General Crook as an authority on the Indian Question does not rank high with the citizens of this portion of the frontier" (Mullane 1968:11). Referring to the Apaches as "well fed wards," citizens objected to his policy of arresting and returning Apaches to the reservation "where they will be provided for better than two thirds of our people" (Mullane 1968:17). Residents would have preferred a general massacre of all those on and off the reservation (Mullane 1968:19, 25, 31-32). At a meeting between stockmen and leading citizens, reported on

January 8, 1886, the group agreed to request that the county commission appropriate \$250 for every hostile Apache killed by citizens, noting that others had already offered \$500 for Geronimo's scalp. The commission agreed to the request in April of that year (Mullane 1968:62, 69).

General Crook's replacement, General Miles, met with approval. Determined to chase the Apaches wherever necessary and take no prisoners, he proceeded to discharge the Apaches hired as scouts by General Crook (Mullane 1968:75-76). Finally, after two major U.S. campaigns and encounters with Mexican forces, the last of Geronimo's group surrendered in 1886. Ultimately, nearly five hundred Chiricahua Apaches were sent to federal prisons in Florida where 119 died from the climate and idleness (Opler 1983:407-408).

Hispanics

Hispanic settlers, who numbered about 1,500 before the Pueblo Revolt of 1680, had increased to only 8,000 by 1760. To counter the reluctance of Spaniards to colonize New Mexico, Spain offered land grants to settlers willing to utilize the land (Magnum 1990:19). Grants were made to individuals who could recruit a number of families and occupy the land as a joint venture. Towns were laid out with areas provided for a church and public buildings. Surrounding grazing land was held in common and individuals were allotted land for farming (Clark 1987:11-12). Grants were also made to individuals for farming or ranching. These smaller units or ranchos ultimately characterized the settlement pattern (Magnum 1990:19).

Irrigation agriculture and livestock raising were the predominant economic activities. Most Hispanics lived at subsistence level, unable to make a profit because of the distance and difficulty of getting to a market (Clark 1987:15). The territory was settled by splinter groups who left established villages in search of suitable pasture for their flocks (Miller 1979:361-363). From Santa Fe, settlement grew eastward into Texas and the Oklahoma panhandle. Northern expansion reached the Arkansas drainage in Colorado and the upper San Juan. Expansion to the west was sparse, crossing the Colorado Plateau into the Little Colorado drainage of central Arizona. Southern expansion progressed slowly. Driven out by Indians, Socorro remained the southernmost outpost as late as 1840. Doña Ana was founded in 1842, and Hispanics spread to Las Cruces by 1848 or 1849. Movement southwest from the Rio Grande is poorly documented. A number of villages were established in the 1860s, including Cuchillo Negro, Mimbres, San Lorenzo, and San Juan (Nostrand 1987:367-385).

Apache hostilities delayed permanent settlement in the Mimbres Valley. A party of Hispanics, disappointed in their luck at mining gold around Pinos Altos, settled at the present location of San Lorenzo in 1869. By 1871, large tracts of land were cultivated and herds of horses and cattle grazed nearby (Lundwald 1983:145). Adolph Bandelier describes San Lorenzo in 1883 as a village of mostly Mexicans lying on a rather steep slope with hardly any room for a plaza (Lange and Riley 1970:187).

The Apaches remained a threat to the San Lorenzo residents and undoubtedly inhibited settlement into the 1880s. A September 18, 1885, article describes the killing of Avaristo Abeyta while cutting wood 2 miles outside of San Lorenzo (Mullane 1968:40).

Grant County Economics

Early settlement in Grant county was characterized by small Hispanic farming and ranching villages on the Gila and Mimbres rivers and by mining towns and the economy they supported. As Berry and Russell point out, history favors Anglo males. Much less is known about the lives and roles of women and Hispanic residents of towns and villages (Berry and Russell 1986:15). The recorded history of Grant County is largely one of mineral finds and market fluctuations.

Copper from Santa Rita was used by the Mogollons as early as A.D. 900 and traded as far as Etowah, Georgia (Couchman 1990:21). An Apache guide revealed the mine's location to a Spaniard, Lieutenant Colonel José Manuel Carrasco, in 1800. Carrasco sold the claim to a wealthy Chihuahua merchant in 1804. From 1804 to 1809, Don Francisco Manuel de Elguea mined and transported 20,000 loads of copper by mule trains to Chihuahua and Mexico City for use in coinage. He built an adobe-walled fort to protect his 600 miners from Apaches and to control the convicts used as laborers (Couchman 1990:21; Northrop 1975:15). The Santa Rita mine changed hands several times and was frequently abandoned for long periods because of hostile Apaches or when transportation costs were too high to make a profit (Lundwall 1983:145). Minor gold discoveries in the Pinos Altos Mountains in 1851 resulted in a temporary settlement of 140 miners (Couchman 1990:57-58). In 1860, Pinos Altos boomed to a town of over 700 men who were provided with food by Hispanic villagers. That year, Apaches attacked the town in a desperate attempt to drive the white men out of the territory. The attack failed to accomplish its purpose, but the Civil War soon caused federal troop withdrawal. Left unprotected, the mines were abandoned. Another gold rush began in 1866 and by 1868 Pinos Altos had 120 houses, two stamp mills, two hotels and seven saloons and stores (Berry and Russell 1986:8-9).

Farming also progressed during this time. The village of San Lorenzo completed an irrigation canal in 1869, one of the oldest canals in the area. The Heredia Ditch, located in the same quarter section as LA 65895, was constructed around 1870 and nearby Ancheta Ditch was constructed about 1875 (Resettlement Administration 1936:8).

In 1870 Grant County had a non-Indian population of 1,143 persons. Of these, 243 were born in New Mexico and 316 in Mexico. Ireland contributed 89 persons, Germany 55, England and Wales 29, and British America 26 (Walker 1872). The ninth census lists 11 minor civil divisions in Grant County: two forts, two ranches, mining and farming villages. Apache Tegue Rancho [sic] was the residence of four Anglos--three miners, a laborer, and a black cook. Central City had 43 males and 46 females; 41 of whom were born in Mexico and 34 in New Mexico. Cow Springs Rancho [sic] was populated by two white males. Fort Cummings had 62 males, 2 blacks, and six females--four were laundresses born in Mexico. Fort Bayard had 220 males (12 blacks) and 21 females (2 blacks). Only eight were born in Mexico and 10 in New Mexico. Hot Springs or Lacy's Ranch had a population of 2 males and a female. The town of Las Mimbres was populated by 101 males and 82 females; 52 were born in Mexico and 80 in New Mexico. Pinos Altos had 146 males and 100 females, 118 born in Mexico and 120 in New Mexico. Another mining community, Ralston City, had 160 males and 14 females. Only 18 were born in Mexico and 20 in New Mexico. San Lorenzo was populated by farmers and farm laborers and their families, 34 males and 15 females. Nineteen were male citizens of the United States, none had attended school, and most could neither read nor write. Silver City had not yet boomed and

was populated by 42 males and 6 females. Ten were born in Mexico (Ninth U.S. Census, Grant County, UNM Special Collections microfilm).

Silver was discovered at Ralston and San Vincent Cienega, renamed Silver City, in 1870 (Berry and Russell 1986:9). The remoteness of mining communities and Apache raids were major deterrents, but many made their fortunes mining or through the economy mining supported. Silver City was essentially an "eastern town." The town's organization was basically Anglo with a separate Spanish-speaking area called Chihuahua Hill (Berry and Russell 1986:12-17). Expanding mining communities required a considerable flow of merchandise, much of which came from Mexico or El Paso. Freight and transportation lines developed to the south through Cooke's Canyon (Couchman 1990:196). Little manufacturing was done. Grant County had only four manufacturing establishments, a lumber and three quartz mills, employing 28 persons (Walker 1872:549, 696).

New Mexico was the poorest state or territory in the United States in 1880, ranking 47th out of 47 in assessed value of property per capita. Real estate was valued at \$40.05 and personal property at \$54.99 per capita compared to the United States average of \$259.93 for real estate and \$77.08 for personal property (Porter 1884:16-17). Grant County, as a whole, had real estate assessed at \$176,537 and personal property at \$706,159 (Porter 1884:211).

By 1880, a rift developed between the Hispanics, who were the majority before 1880, and the more recent arrivals. The Anglos were generally committed to the American ideal of progress while many Hispanics only grudgingly accepted change. The progressives succeeded in establishing the New Mexico Bureau of Immigration whose primary purpose was to "break the restricting chains of history so that the territory might assume its proper role as a fully integrated component of the national economy" (Lang 1976:195). The bureau disseminated information on New Mexico, especially its opportunities for development (Lang 1976:195). Grant County mineral resources were described by the Bureau in 1882 as:

The very abounding and unlimited abundance of mineral within sight and upon the very surface, the great upheavals of native wealth which mark the foothills and mount the slopes and ride the mountain crests, are well calculated to amaze the sight-seeing tourist, to enthuze the scientist, to appetize the covetous greed of the miser, to stagger the powers of the most practical reckoner, and to fascinate the capitalist and speculator, and the conception and estimate of what may be emboweled in the depths beneath, is simply of such hugeness and magnitude as to surpass all human comprehension. (Quoted in Lang 1976:209)

Grant County had a population of 4,539 in 1880. The Compendium of the Tenth Census indicates that there were 68 farms, 5,267 acres of improved land valued at \$155,970 with improvements, and \$102,137 worth of livestock (U. S. Census Bureau 1885:43, 718). The growing population created local markets, as did mining camps that purchased much of their food, and the increased activity of military establishments. The railroad opened markets in other areas (Christiansen 1974:42). On March 10, 1881, the Santa Fe Railroad joined the Southern Pacific Railroad at Deming tying New Mexico to the rest of the nation (Christiansen 1974:58).

The county was considered the principal mineral producer for the territory having 12 mines (Emmons and Becker 1885:103). The Tenth Census reports that only the northern half of

Grant County was used for pasture because "red and white marauders" interfered with holding large herds (Gordon 1883:34). Cattle ranching, which had become a big business, was hurt by less than normal rainfall between 1884 and 1886 (Lundwall 1983:97).

By 1880, Silver City was the supply center for the southwest corner of the state. Goods came from the east and gold and silver bullion were shipped back. The city with a population over 1,800 had three churches, three schools, three quartz mills, twelve stores, two hotels, four restaurants, four livery stables, a planing mill, sixteen saloons, four blacksmiths, a jeweler, two drug stores, a cracker factory, three dance halls, a furniture factory, two foundries, a machine shop, and two banks (Berry and Russell 1986:20). Mining continued to boom and the railroad spur reached Silver City in 1883 (Berry and Russel 1986:23-24).

By 1880, the inhabitants of the San Lorenzo precinct had become more diverse. In addition to farmers there were now carpenters, millers, herders, seamstresses, teamsters, musicians, blacksmiths, a nurse, several merchants, a smelter operator, a clerk, and a miner. Residents included one from Italy, two from Spain, one each from Georgia, Mississippi, Arizona, Virginia, Tennessee, two from Ohio, and 23 from Texas (Tenth U.S. Census, Grant County, UNM Special Collections microfilm).

The population of Grant County more than doubled between 1880 and 1890. A depression that began in 1892 caused the silver market to crash in 1893. Silver City went from a population of 4,000 in 1886 to 2,300 in 1893. At the same time, new gold was found in Pinos Altos and the Black Range, and iron and zinc in other areas (Berry and Russell 1986:37).

In 1890, the principal industries were mining and stock raising. Cultivation was largely carried out in conjunction with herding or in the vicinity of mining camps or railroad towns (Newell 1894:198). Table 1 gives an indication of the relative economic value of agricultural, pastoral and mining property values in 1896 by precinct. More land but less value was devoted to livestock grazing while mining improvements were of the greatest value. San Lorenzo precinct was more valuable for farming than grazing. Pinos Altos, Silver City, Santa Rita, and Lordsburg precincts had economies largely based on mining.

Table 2 traces the development of farm sizes, values, and products, and of gold, silver, and copper production between 1880 and 1910 in Grant County. On a countywide basis, the number and values of farms and almost all farm commodities increased with time. A few, such as the sheep and goat counts, probably reflect idiosyncratic recording of species. Corn and forage crops increased the most, reflecting the growing livestock industry. Irrigation agriculture also expanded and by 1900 there were 67 irrigation systems and 158 miles of ditches costing \$154,073 to construct (U.S. Census Bureau 1902a:854). The number of systems increased to 75 by 1910 but the miles were reduced to 154 and the cost to \$72,242. Gold and silver mining also grew. Production is not broken down by county after 1890. In 1910 there were 47 enterprises employing 960 persons throughout New Mexico (U.S. Dept. of Commerce 1913a:121).

Human population growth slowed over time. The population doubled between 1880 and 1890, grew 25 percent from 1890 to 1900, and 13 percent from 1900 to 1910 (Table 3). Population characteristics also changed. The 1870 Grant County population of 1,143 included "natives" or persons born in the United States: 21.2 percent born in the territory, 27.6 percent born in Mexico, 7.8 percent born in Ireland, and 4.8 percent born in Germany. There were 850

Table 1. Grant County, Relative Value of Agricultural Land with Improvements, Pastoral Land with Improvements, and Mining Improvements, Based on the 1896 Tax Rolls

Precinct	Agricultural Land		Pastoral Land		Mining Value
	Acres	Value	Acres	Value	
Central	96	5,250	3,206	9,150	12,200
Pinos Altos			960	2,000	46,010
Silver City			5,561	15,630	38,700
Lower Mimbres	3,544	34,250	3,918	5,850	
San Lorenzo	1,267	14,320	720	1,200	
Rodeo			640	850	4,490
Upper Gila	4,540	29,320	5,948	10,950	
Lower Gila	760	10,950	160	350	
Stiens			678	3,540	
Hachita			8,347	17,930	6,450
Fierro			10,070	21,020	
Sapello	1,640	14,500	1,720	3,650	13,730
Santa Rita			400	600	14,790
Red Rock			280	700	3,270
Separ			240	600	910
Gold Hill			820	1,800	5,870
Mangus			630	1,800	
Animas			560	1,220	4,200
Steeple Rock	320	800			2,100
Lordsburg			880	3,600	15,000
Pine Cienega			1,480	2,820	
Oak Grove			1,380	2,180	8,680
San Juan	1,255	13,800	520	1,300	
White Water	940	3,880			
White Signal	1,240	5,550	1,920	4,640	
Grant County	21,827	148,250	51,032	113,180	176,400

(Source: State Records Center and Archives, Grant County Tax Rolls, reel 3)

Table 2. Grant County Economics 1880 through 1910

	1880	1890	1900	1910
Number of Farms	63	294	472	627
< 10 acres	2	3	80	87
10 to 49 acres	10	23	93	84
50 to 99 acres	9	24	34	44
100 to 500 acres	46	238	240	364
> 500 acres	1	8	35	48
Mean Farm Size (acres)	144	171	203	281
Number Owner Cultivated	60	283	332	455
Irrigated Acres		5,718	10,976	14,834
Value of Farms & Improvements	155,970	822,420	1,207,175	6,912,600
Value of Implements & Machines	10,925	29,240	88,680	119,023
Value of Livestock	102,137	1,467,650	3,547,701	3,914,066
Animals on Farms (n=)				
horses	220	3,937	13,929	10,089
mules	53	156	308	341
milk cows	534	1,632	625	1,631
cattle	4,188	118,051	202,461	196,888
sheep	40,815	8,184	8,242	625
goats			15,068	46,271
swine	263	715	1,262	2,263
chickens (*poultry)	*2,493	6,856	12,340	*22,299
Livestock Products				
dozen eggs	9,495	20,336	46,840	99,578
gallons of milk	805	118,650	92,248	237,569
pounds of butter	15,222	10,449	6,456	13,317
pounds of wool	40,815	39,896	27,237	
Crops (acres)				
barley	389	176	175	497
corn	1,443	2,228	4,966	5,330
wheat	458	27	119	91
forage crops	450	1,325	1,419	3,947
beans			171	256
potatoes		19	78	50
grapes (number of vines)			6,928	1,324
orchards (value of products)	2,220	9,720	13,204	
Minerals				
value of gold bullion	25,323	31,052		
value of silver bullion	771,301	346,680		
pounds of copper produced	869,498 (1882)	850,034	4,169,400	

(Sources: Day 1892:87; Emmons and Becker 1885:341; Newell 1894:341; U.S. Census 1883, 1895, 1902a, 1902b, 1905; U.S. Dept. of Commerce 1913b)

Table 3. Grant County Population in 1890, 1900, and 1910 by Precinct

Precinct	1890	1900	1910
Central	851	1,008	1,137
Pinos Altos	1,015	1,118	393
Silver City	2,268	2,971	3,659
Dywer	530	486	288
San Lorenzo	334	329	357
Rodeo			378
Cliff	351	375	649
Lower Gila	190	306	281
Steins Pass	238	195	374
Hachita	129	93	678
Fierro			721
Mimbres	352	295	294
Santa Rita	133	1,874	1,951
Redrock		186	135
Separ	170	81	250
Gold Hill	124	79	57
Mangas	17	96	153
Animas			62
Steeplerock	165	45	120
Lordsburg	232	796	1,323
Pine Cienega	195	100	78
Oak Grove	17	172	974
Swartz	432	314	308
Whitewater			193
Grant County	9,657	12,883	14,813

(Source: U.S. Department of Commerce 1913b:547)

males and 293 females. One person is reported to have attended school, a "foreign" female. Of those over 10 years old, 291 could not read and 355 could not write (Walker 1872:422, 578).

The 1910 population of 14,813 was largely "native whites" (72.9 percent). Those born in Mexico comprised 21.8 percent, Ireland .4 percent, and Germany .7 percent. Males outnumbered females 8,388 to 6,425. Of the males of voting age, 20.3 percent were illiterate while 20.6 percent of those under 10 years of age were illiterate. Fifty-nine percent of the school aged children attended school (U.S. Dept. of Commerce 1913b:587).

Public Land Acquisition in New Mexico

The territory comprising New Mexico was acquired from Mexico in the Treaty of Guadalupe Hidalgo of 1848, purchased from Texas in 1850, or bought from Mexico in the Gadsden Purchase of 1853 (Coggins and Wilkinson 1987:51). Until 1934, the official United States policy was to sell or give away its public land, favoring the small farmer and avoiding monopolies in land holdings (Coggins and Wilkinson 1987:47).

The United States acknowledged grants made to individuals by predecessor nations. Article VIII of the Treaty of Guadalupe Hidalgo agreed to recognize claims by persons in the territory previously held by Mexico. These land holdings were either small strips of irrigated land along a water course belonging to poor farmers or large grants to individuals made by the Spanish and Mexican governments (Westphall 1965:48). Claims made on the basis of these grants were treated in two ways. From 1854 until 1891, the Surveyor General of New Mexico had the duty of ascertaining the origin, nature, character, and extent of claims. He could hold hearings, issue notices, summon witnesses, administer oaths, and perform all necessary acts. After an investigation, a full report on the validity of each claim was presented to Congress for final action (Westphall 1965:49). Claimants had to furnish an authenticated plat with precise boundaries, evidence their title was legitimate, and produce evidence regarding conflicting claims. The process was expensive, depended on legal advice, and often required hiring lobbyists to convince Congress of the claim (Clark 1987:34). Aside from a chronic lack of funds for settling land claims, claimants were often ignorant of their rights and the same parcel of land was often claimed by a number of related or unrelated individuals (Westphall 1965:49). The issue was further complicated by the nature of the land holdings. Narrow strips of land fronting a winding watercourse were not compatible with the rectangular survey system used by the U.S. government, and settlers often lived in groups around a plaza where they could defend themselves against Indian attack rather than on the land itself (Westphall 1965:18-19). In practice, many claimants refused to submit evidence of their title out of fear they could lose their proof of title, were convinced that possession was their best proof of title, and were suspicious of an alien land system (Clark 1987:35; Westphall 1965:49). Of the claims submitted to Congress, only 45 claims for a total of 6,676,831 acres were confirmed (Westphall 1965:117).

The Court of Private Land Claims, created in March of 1891 and operating until 1904, heard claims by persons or corporations on any grant, concession, warrant, or survey that had not yet been confirmed by Congress. After a claimant filed a petition asking the court to validate the claim, the court could determine validity and boundaries according to national law, the Treaty of Guadalupe Hidalgo, and customs of the government that made the grant. To be valid, the

claim must have been perfected when the treaty was signed or would have been perfected if the United States had not acquired the territory (*United States v. Sandoval*, 176 U.S. 278 [1896]). Claims for 34,653,340 acres were submitted to the Court of Private Land Claims. Only 1,934,986 acres were confirmed, releasing a large amount of land for settlement (Westphall 1965:117). If a claim was not filed or failed, the land became part of the public domain (Clark 1987:36).

The Land Act of 1796, which adopted the 36 section survey system still used today, also provided for public land to be "offered" at auction. A minimum price was set at \$2.00 per acre and land could be bought for 5 percent down with the balance paid within a year. Terms were later liberalized to increase revenue and the Graduation Act of 1854 allowed progressive reductions in cost for unsold offered land. Credit purchases ended in 1920 (Coggins and Wilkinson 1987:89-90).

In New Mexico, the Land Office, which was funded by land sales, stressed purchase over homesteads applications (Westphall 1965:69). Land that was purchased often bordered streams and for a small cost, a rancher could tie up a much larger parcel of land dependent on the water source (Westphall 1965:68). In 1870 alone, 1,644,388 acres were offered for public sale (Gates 1968:436). Between 1868 and 1891, 112 public auction sales placed 15,671 acres in private hands. Converting preemption and homestead entries and private entry sales added more acres. All total, 3,750 individual sales were made for 484,373 acres (Westphall 1965:130).

A number of congressional acts were aimed at distributing the land to actual settlers. Before 1840, a series of limited preemption acts allowed settlers to purchase land they already occupied. The Preemption Act of 1841 (repealed in 1891) allowed settler-squatters to buy their claims without competitive bidding and authorized prospective preemption of up to 160 acres of surveyed land at \$1.25 per acre. Cash payment was usually required but liberal credit was given for improvements already made (Coggins and Wilkinson 1987:88-89). Before the Act of 1854 extended preemption to unsurveyed areas (Westphall 1965:68), many preemption claims remained unsettled because they were outside the range of surveyors and land offices (Coggins and Wilkinson 1987:88).

The Preemption Act (5 Stat. 453; R.S. 2257-88 [1841]) applied to land that had not already been reserved, was not part of an incorporated town city, was not already settled for trade or business, and was not saline or mineral land. The applicant had to be the head of a family, widow, or single person over 21 years of age, and a U.S. citizen or had filed a declaration to become a citizen. They had to inhabit and improve the land and erect a dwelling. Only one preemption claim could be filed and anyone who already owned 320 acres in the United States or its territories or had abandoned a residence on land already owned could not acquire land through preemption. Proof of actual settlement was required before a patent was issued.

Westphall (1965:70) estimates that 70 percent of the preemptive claims made in New Mexico between 1861 and 1891 were fraudulent. Either the applicant did not exist or did not settle the land as claimed and turned the land over to ranching interests. Eventually, 2,574 preemptive sales for 369,631 acres were recorded (Westphall 1965:130).

In response to what had become a class of landless and unemployed eastern workers created by emigration and industrialization, Congress passed a number of Donation Acts or acts

that encouraged settlement by giving land to actual settlers (Coggins and Wilkinson 1987:91). In New Mexico, the primary purpose was public defense, to strengthen settlements exposed to attacks by Indians. The Act of 1854, which created the office of the New Mexico surveyor general, granted 160 acres of land to any white male citizen over the age of 21 who resided in New Mexico prior to January 1, 1853, and who was a resident when the act was passed. The claimant must continuously reside on and cultivate the land for at least four years, and the land must have already been surveyed or could be selected by legal subdivision within three months after survey. Those who had claimed under Mexican or Spanish land grants were excluded and holders of donations could not file for homesteads or preemptions (Westphall 1965:37). The New Mexico Donation Act settled 332 grants for 52,609 acres (Gates 1968:390).

The Homestead Act of 1862 (43 U.S.C.A §§ 161-284, repealed in 1976) allowed entry onto a maximum of 160 acres of land subject to preemption, later extended to unsurveyed land where Indian title was extinguished. The land was free except for a filing fee. The applicant had six months to establish actual residence after filing an entry and could commute the entry into a cash sale after 14 months of settlement and cultivation. Otherwise, five years of settlement and cultivation were required before the claimant could give notice, file an affidavit, and receive a patent. A person could have only one homestead unit but could claim another 160 acres through preemption. The system was often misused. Once an entry was filed, no one else could file on that land unless the claim was released by the claimant or until the five years had expired, even if the land was abandoned. During the five years, timber and other resources could be stripped from the land by individuals who never tended to file an affidavit for a patent (Coggins and Wilkinson 1987:91-92).

The Homestead Act incorporates an eastern ideal of the small farmer that was impractical when applied to arid and semiarid environments like New Mexico. Eventually, the Act became just another means of acquiring large holdings by cattle ranchers (Westphall 1965:42-43). Between 1868 and 1891, there were 6,784 homestead entries filed covering 940,828 acres of land in New Mexico. Of these, 3,702 received patents for 549,297 acres (Westphall 1965:137-138). Another 315, for 46,686 acres, were commuted to cash payments (Westphall 1965:130). Peak years for granting homestead patents in New Mexico were from 1908 through 1911 when 22,841 patents were issued for 3,728,351 acres (Tainter and Levine 1987:134).

Little land could be settled and cultivated for the full five years required by the Homestead Act and much of the arid and semiarid West remained unclaimed. Recognizing that western land required irrigation and that irrigation took capital and larger blocks of land, Congress passed the Desert Lands Act of 1877 (43 U.S.C.A. §§ 321-339). Under this act, 640 acres could be purchased at 25 cents per acre upon proof the land was irrigated. Most applicants failed to meet the requirements and land acquired under this act often went to large corporations through dummy claimants with very little land being irrigated (Coggins and Wilkinson 1987:92-93).

Claims failed because the Desert Land Act required actual appropriation of water and reclamation. Mineral and timber land were excluded and the claimant had to be a citizen of the state or territory where the entry was sought. Before 1908, only surveyed land was available under the act, but if the claimant was in possession before the survey, preference was given. The applicant had to file an irrigation plan and must have spent at least \$3.00 per acre for the whole tract, a dollar an acre per year for three consecutive years. If the applicant failed to spend the

money or did not finalize the claim within four years, the land reverted to government ownership.

In New Mexico, most of the irrigable land had long been privately owned. Ranchers used the Desert Land Act to acquire maximum acreage adjacent to streams or springs and thus control large quantities of grazing land (Clark 1987:48; Westphall 1965:77-78). Between 1879 and 1894, 398 certificates for 139,622 acres were issued (Westphall 1965:128).

By 1905, New Mexico still had 52,095,312 acres of unreserved and unappropriated land (Gates 1968:502). Determined to settle the West, Congress passed the Enlarged Homestead Act of 1909 (43 U.S.C.A. §§ 218-221, repealed in 1976) allowing entry onto 320 acres. Again, most of these claims failed due to drought or ended up in the hands of large ranchers (Coggins and Wilkinson 1987:94). In 1912, Congress reduced the period of actual residence from five to three years and the homesteader could be away from the land five months of each year (Gates 1968:507).

A few years later, the Stock-Raising Homestead Act of 1916 (43 U.S.C.A. §§ 291-301, repealed in 1976) was passed. This act allowed entry onto land designated by the Geological Survey (Gates 1968:517) as "chiefly valuable for grazing and raising forage crops, [that] do not contain merchantable timber, are not susceptible of irrigation from any known source of water supply, and are of such character that six hundred and forty acres are reasonably required for the support of a family" (43 U.S.C.A. § 292, repealed 1976). By this time, the government recognized the value of land with geological structures containing oil and gas and reserved the right to all minerals for the United States (§ 291).

An applicant could already have a homestead if it was within 20 miles of the proposed Stock-Raising Homestead entry. Instead of cultivation, the applicant was required to make improvements of at least \$1.25 per acre on at least half the parcel before final proof was submitted within three years of the entry.

Stock-Raising Homestead patents fragmented large tracts of public grazing land and led to the destruction of much of the range. Although the act was not repealed until 1976, the Taylor Grazing Act of 1934 (43 U.S.C.A. §§ 315 et seq.) largely reversed the policies of the act (Coggins and Wilkinson 1987:95-96).

Table 4 summarizes the number of homestead entries, acres, and average patent size by ten-year intervals. Patent sizes averaged near the maximum, increasing with the passing of the Enlarged Homestead Act in 1909, and the Stock-Raising Homestead Act in 1916. The peak years for issuing patents were between 1900 and 1929.

The peak period for land acquisition was slightly earlier in the area around San Lorenzo. In the four sections along the Mimbres River (Fig. 2), there were three homestead patents issued and one cash purchase between 1882 and 1889; eight homestead patents issued and two cash sales between 1890 and 1899; five homestead patents issued between 1900 and 1909; three homestead patents issued from 1910 to 1919; and two stock-raising homestead patent issued in 1935 and 1937. Between 1909 and 1915, another three homestead entries and one desert land entry were released by the applicant and one homestead entry was canceled by the Land Office. In addition, the town of San Lorenzo bought the 120.0 acres it occupied in 1912 (Bureau of Land Management, Public Room records).

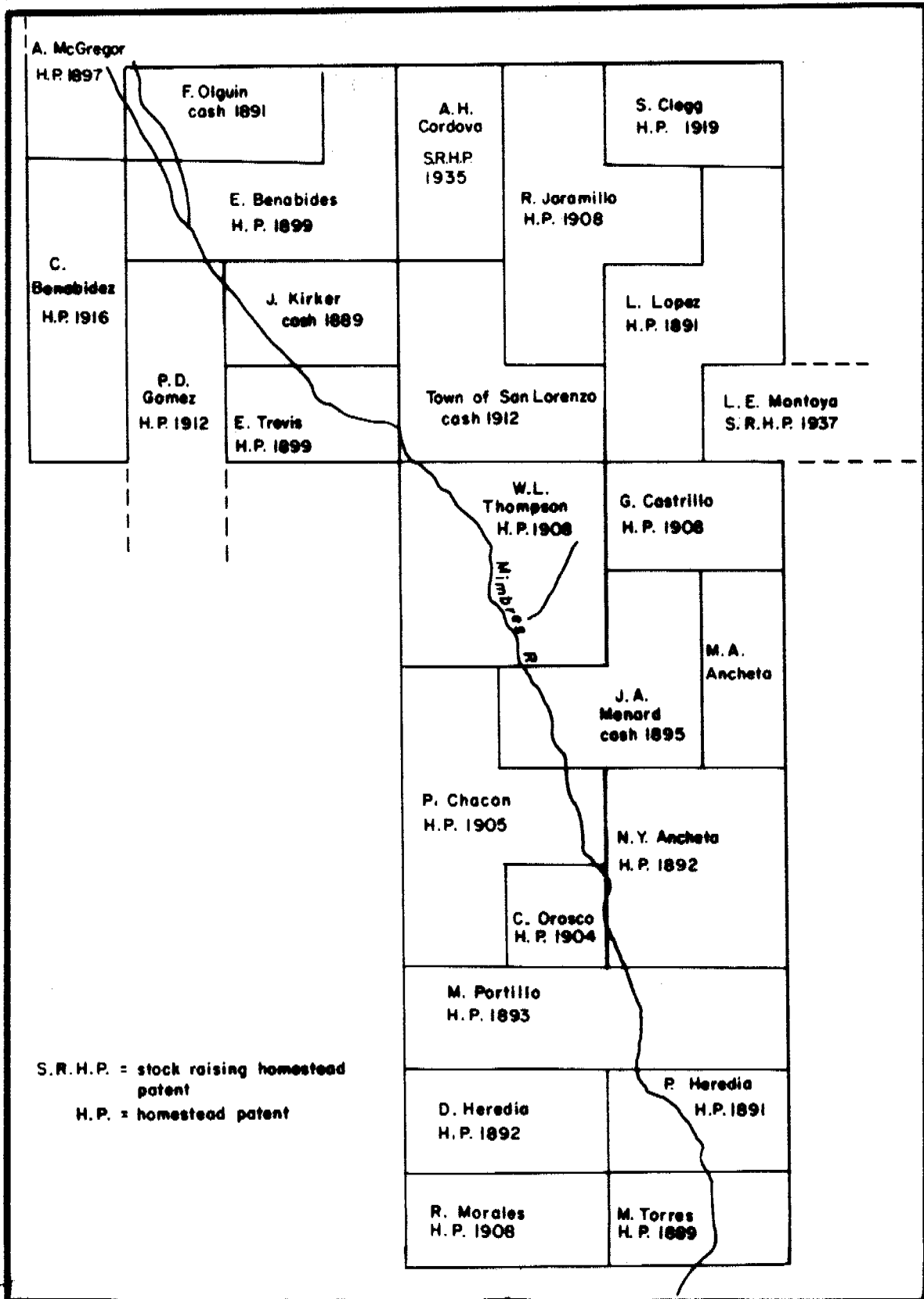


Figure 2. Homestead and cash patent date and location.

Table 4. Homestead, Enlarged Homestead, and Stock-Raising Homestead Patents issued in New Mexico between 1873 and 1944

Years	Patents Issued	Acres	Average Acres per Patent
1873 - 1879	74	11,563	156.3
1880 - 1889	2,236	327,694	146.5
1890 - 1899	2,815	418,429	148.6
1900 - 1909	17,173	2,616,964	152.4
1910 - 1919	34,693	6,193,625	178.5
1920 - 1929	22,589	6,367,870	281.9
1930 - 1939	8,098	3,413,036	421.5
1940 - 1944	264	101,945	386.1

(Summarized from data in Tainter and Levine 1987:134)

The earliest patents and cash sales were for land along the river. Few requested the maximum acreage allowed. Individuals acquiring the land were largely Hispanic (Table 5). Eighteen of the 23 had Spanish names; nine were born in Mexico, three in New Mexico, one was a Texan, and five are not recorded. Of the Anglos, one was from Scotland, two were from Texas, and origins of the other two are not recorded. Few originated in the town of San Lorenzo but most had lived in Grant County. The usual pattern was for the family or individual to acquire the land, and once modern transportation was developed, to move to San Lorenzo. With the possible exception of Pedro Gomez, those whose age or approximate age could be determined were in their 40s or older when their patents were finalized. Ages range from 41 to either 69 or 88 if Anastacio Cordova is the same person as the Georgetown precinct laborer found in the census records, an average of 54.4 years (56.8 years of age if Cordova is included). Most were laborers or farmers who used the Homestead Act as it was intended; to settle and use the land.

Table 5. Land Owners in Sections 19, 30, 31 of T 17S R 10W and Section 24 of T 17S R 11W

Land Owner	Born	1870s	1880s	1890s	1900s	1910s	Comments
Ancheta, N.Y.	Sonora, Mexico	Justice of the Peace, Pinos Altos	general merchandise, San Lorenzo; taxes 1884	HP 1892	77 years old, retired farmer; deceased 1905		
Ancheta, M.Q.				taxes 1893, 1895; HP 1898			
Benabides, Cresencio						HP 1916	

Land Owner	Born	1870s	1880s	1890s	1900s	1910s	Comments
Benabides, Encarnacion			HP 1889				
Castrillo, Guadalupe	Mexico?		laborer? in Central City		50 years old, farmer; taxes 1901; HP 1908	taxes 1911; deceased 1912	
Chacon, Petronilo	Texas				42 years old, farmer; HP 1905		
Cleg, Stanley						HP 1919	
Cordova, Anastacio	Chihuahua, Mexico		33 years old? laborer Georgetown precinct				SRHP 1935
Gomez, Pedro	New Mexico				Santa Rita? 18 years old, miner	HP 1912	
Heredia, Dolores	Mexico	Los Mimbres 30 years old, farm laborer	taxes 1884	HP 1891 and 1892	62 years old, farmer; deceased around 1907		
Jarmillo, Rafael D.	New Mexico		40 years old? farmer		54 years old, day laborer; HP 1908	70 years old, farmer; taxes 1911	
Kirker, Joseph L.			CP 1889				
Lopez, Lino	Sonora, Mexico	San Lorenzo, 40 years old, farmer	HP 1891; house in San Lorenzo 1895	60 years old, farmer	74 years old, farmer		
McGregor, Archibald	Scotland		Alex McGregor?	HP 1897	49 years old, farmer	60 years old, farmer and stock raising	
Menard, John A.	Texas		taxes 1888	house in Georgetown 1890; CP 1895		son, John Jr. 19 years old, farm laborer	probably the brother of Mrs. W.L. Thompson
Montoya, Leopold E.							SRHP 1937
Morales, Rumoldo	Mexico			house? in San Juan 1891	Santa Rita, 44 years old, laborer; HP 1908	of Garfield, New Mexico in 1911	

Land Owner	Born	1870s	1880s	1890s	1900s	1910s	Comments
Olgium, Fauslino	Chihuahua, Mexico		San Lorenzo, 30 years old, musician; taxes on 80 acres 1889	CP 1891; house in San Lorenzo 1899	46 years old, farmer		
Orosco, Cayetano	Chihuahua, Mexico	to U. S. in 1869	Georgetown, 36 years old, laborer		65 years old, farmer; HP 1904; deceased 1909	widow, house in San Lorenzo 1911	
Portillo, Mauricio	Chihuahua, Mexico		Silver City, 41 years old, laborer; San Lorenzo taxes 1882, 1884	HP 1893	52 years old; farmer; house in San Lorenzo 1907	60 years old, farmer; deceased 1912	
Thompson, William Lee	Texas	Pinos Altos, merchant	San Lorenzo merchant and farmer; HP 1882		67 years old, retired farmer		
Torres, Miguel	New Mexico	Central City, 40 years old, farmer	San Lorenzo, 56 years old, farmer; HP 1889				
Trevis, Estanislado				HP 1899			

(Compiled from census records, Grant County tax rolls, and BLM homestead records. San Lorenzo Precinct unless otherwise noted. HP = homestead patent; SRHP = stock-raising homestead patent; CP = cash patent)

THE OROSCO HOMESTEAD

Documentary History

Cayetano Oroasco and his family were the primary residents of LA 65895. Neither Cayetano nor his wife Leonides could speak or write English. Census takers guessed at ages and made their own interpretations as to the spelling of names and dates of citizenship.

Cayetano Oroasco was not the first settler of this parcel. His Homestead Affidavit (Application No. 2834) dated May 27, 1898, has a notation that an "adobe dwelling, out houses, well [were] purchased by me from widow of late claimant." The Bureau of Land Management has no record of an earlier entry for this parcel. This same affidavit states that he was a native born citizen, which is inconsistent with his Homestead Proof filed May 31, 1903, claiming citizenship under provisions of the Treaty of Guadalupe Hidalgo, and the 1880 census records stating his place of birth as Chihuahua, Mexico.

Cayetano, his wife Leonides, and at least one child entered the United States in 1869 (Twelfth Census, Grant County, UNM Special Collections microfilm). Why they chose to leave Mexico is not recorded. However, from the time of independence in 1821 through the next three decades, Mexico was in chaos. Regional leaders ruled with virtual autonomy from the Mexican government (Wasserman 1984:2). Vast mineral resources, cheap land, and the proximity to the United States attracted foreign investment to Chihuahua and gave rise to powerful native elites. Foreign capital and technology was concentrated in the hands of a few companies that dominated the state's economic development. This concentration of land and wealth caused profound social disruptions, creating a middle class and a peasantry. The region was at the mercy of world economic conditions, subjecting Chihuahua to periodic depressions that destabilized society and led to deep-seated social unrest (Wasserman 1984:5-6). The 1850s and 1860s were times of continual endemic violence, political turmoil, and economic depression. Apaches terrorized northern and western Chihuahua into the 1870s. Warfare and banditry destroyed systems of transportation and communication (Wasserman 1984:26-27).

In 1870, Grant County had a population of 592 native or U.S.-born and 551 foreign-born residents. Mexico contributed the bulk of the foreign born persons, 316, followed by Ireland at 89 and Germany at 22. Of the native born, 243 were born in the territory with others from New York, Pennsylvania, Texas, and Ohio (Walker 1872). Only 11 "minor civil divisions" existed. San Lorenzo was populated by farmers and farm laborers with no evidence of merchants or other occupations. Forty-three of the 49 San Lorenzo residents had a foreign-born father and 44 had a foreign-born mother. None had attended school (Ninth Census, Grant County, UNM Special Collections microfilm).

Cayetano Oroasco first appears in the 1880 census records for Georgetown Precinct. The entry identifies him as "Casitana Rasco," a 36-year-old laborer from Chihuahua who had been unemployed for three months during 1880. Also listed is a wife, "Lionides," 30 years old and born in Chihuahua; a son Eululeo (probably Ulalio), 11 years old; a daughter Petronilla, 10 years old; a son Uugiris, seven years old; a daughter Estanislade, six years old; and a son Alefonso, four months old (Tenth Census, Grant County, p. 17 copy substituted for the original, UNM Special Collections microfilm).

"Calletano" Orosco is listed on the 1893 tax rolls for Grant County. He was charged \$2.00 tax on \$90.00 worth of personal property. Also listed is Francisco Orosco, probably related, the owner of 160 acres in Township 17S Range 10W. In 1897, this property with a ranch and improvements was valued at \$505 (State Records Center and Archives, Grant County Tax Rolls, reel 3). The land was lost in a tax sale on December 31, 1900. Grant County bought it for \$10.76 (Grant County Court House records). Francisco "Orrasco" was a 24-year-old resident of San Lorenzo in the 1870 census. His occupation is listed as farm laborer (Ninth Census, Grant County, UNM Special Collection microfilm). A relationship between Francisco and Cayetano may have prompted Cayetano to settle in this area. In 1910 Francisco was a peddler renting a house in San Lorenzo precinct (Thirteenth Census, Grant County, UNM Special Collections microfilm). Cayetano Orosco does not again appear on the tax rolls until 1908, four years after receiving his homestead patent (State Records Center and Archives, Grant County Tax Rolls, reel 6).

According to the Territorial Census of 1885, the Mimbres River District had a population of 1,150 persons. The entry for the Oroscos gives only first initials and lists C. Orosco, 45 years old; a wife, 40 years old; and seven children: a son 17 years old, daughter P. 16 years old, son 10 years old, a daughter A. nine years old, a son A. six years old, a daughter P. three years old, and a daughter one year old (1885 Territorial Census, Grant County p. 46, UNM Special Collections, microfilm).

The population of Grant County grew from 9,657 in 1890 to 12,883 in 1900 (Table 3). During this period, Cayetano Orosco filed his homestead affidavit agreeing to settle, cultivate, and improve the land. The 1900 census contains the most detailed information on the Oroscos. The Precinct 5 entry lists "Callefano" Orosco as born in August of 1834, 64 years old (he would have been 66 if born in 1834) and married for 41 years. He claims to have resided in the United States for 30 years and obtained citizenship in 1869, from the Treaty of Guadalupe Hidalgo. (To claim citizenship under this act, he should have been in the United States in 1848 when the treaty was signed.) His occupation is listed as farmer noting he had not worked that year and owned the land free. Leonides was born in November of 1843, resided in the United States for 30 years, and was 56 years old. Obviously an error, she is listed as having three children. A daughter, Ursula is recorded as born in October of 1865, 35 years old, and in the United States for 30 years. She is described as a widow with eight children, seven living, born in old Mexico, and with no education. The number of children is accurate for Leonides suggesting that the census taker reversed some of the information on the two women. Ursula was not listed with the family in earlier census records but she could have married and left the family before the 1880 census. Also living with his parents was "Alifonso," born in New Mexico in February 1888, 20 years old, single, and a farmer/laborer with no education who had not worked that year. Daughter Ramona was born in July of 1891, was eight years old, and had attended five months of school. The household was completed by two grandchildren, Santiago Alvarez born in February of 1892 and eight years old and Libraday Alvarez born in March of 1897 and three years old. Santiago had also attended five months of school (Twelfth Census, Grant County p. 135, UNM Special Collections, microfilm).

On May 31, 1903, Cayetano filed his Homestead Proof-Testimony of Claimant. His age is given as 63 years and he claims to have constructed a rock house and established residence on the land as soon as his original filing was made. His family is listed as a wife and nine children. He claims to have never left the homestead for more than a day or two at a time since filing and

to have grown six acres of crops every year. The character of the land is identified as principally grazing with no water supply except from a well. His Affidavit (form 4-102 b) lists his improvements as a four-room stone house, a four-room adobe house, a well, an orchard, fencing, and outbuildings valued at \$500. A patent for 40 acres was granted on March 1, 1904 (Certificate No. 1694).

By 1910, Ulalio Orosco, the oldest son, was 42 years old and resided in Santa Rita, working in the copper mines. He had a wife, three sons, and five daughters ages 10 months to 18 years (Thirteenth Census, Grant County, UNM Special Collections, microfilm). Cayetano passed away in 1908 or 1909. He is listed on the 1908 tax rolls but the 1910 census identifies Alfonso Orosco, still single and 27 years old, as the head of the Orosco household. His occupation is listed as farm laborer, but he had not worked in 1909 or 1910. The entry states he could read and write and owned the house free. Also listed for the household are "Lionida," a widow of 55 years who claims to have had 10 children, five still living; a nephew Santiago, 19 years old, single, and an unemployed farmer/laborer; a niece Paula, 17 years old and single; and another niece, Librada 15 years old and single (Thirteenth Census, Grant County p. 21, UNM Special Collections, microfilm).

From 1909 until 1912, the tax rolls list the owner of the property as "Diondes de" Orosco. In the 1908 tax rolls, the Orosco land was valued at \$50 and the improvements at \$50. In 1912 the land value was \$110, the improvements \$25, horses and mules were valued at \$70, and personal property at \$100. Also listed is a house in San Lorenzo valued at \$22.50 (State Records and Archives, Grant County Tax Rolls, reels 6 and 7). The latter suggests that all or part of the family moved to town after the 1910 census and that the property continued to be used for horses and mules.

On September 13, 1923, Leonides de Orosco, widow of San Lorenzo, executed a deed concerning the property, to Santiago Orosco, also of San Lorenzo. This may have conveyed joint ownership or only part of the parcel since Leonides deeded 100 ft on each side of the right of way for Black Range Road to the Board of Commissioners of Grant County on May 24, 1926 (Grant County Court House records).

The land left the Orosco family in 1931. That year, a flurry of deeds, probably designed to insure clear title, was executed. On January 20, Miguel Orosco, Santiago Orosco, Estefina Orosco, Ramona Orosco Ribal, and Bernner Ribal deeded their interest in the property to Alfonso Orosco. On March 10, 1931, Alfonso and wife Justa deeded the property to Maurice E. Coates, Sr. That same day Angeleta Gomez, Leigardo Montoyo, and José Duran, heirs of Paula Orosco Duran, deeded the same property to Coates. Two days later Pedro Leon and Antonio Leon, probably heirs, signed a quitclaim deed for the property to Coates. On April 18, a final decree gave Maurice E. Coates sole ownership of the property (Grant County Court House Records).

The property remained with the Coates family until June 6, 1942, when E. M. Coates (widow) deeded the property to Thomas E. Harrington. Thomas and Flora Harrington also acquired parts N½ of NE¼ of Section 31 and the SW¼ of SE¼ of Section 30 in 1931, and 166 acres in the E½ of NW¼ of Section 31 in January of 1939 (Grant County Court House records). The artifact assemblage suggests that none of the owners that succeeded the Oroscos used or lived in the structures comprising LA 65895.

Environment

Early travelers left glowing descriptions of the Mimbres Valley. First Lt. William Helmsley Emory, who viewed the Mimbres River in October of 1846, described it as a truly beautiful mile-wide valley with rich fertile soil, dense cottonwood, walnut, and ash trees. The water was fast moving, about 3-m wide and 1-m deep, and filled with trout (Thrapp 1974:20). A similar description is found in John Russel Bartlett's personal narrative. Reaching the valley in April of 1851, Bartlett describes a valley nearly a mile wide covered with "verdue" such as they had not seen since leaving the area of Fredricksburg, Texas. Deer grazed the bottom, which was thickly wooded with cottonwood, ash, and oak. Wild roses, turkeys, and "wild hogs" were also noted (Bartlett 1965:221-223).

Physiology and Geology

San Lorenzo and LA 65895 are within the Mexican Highlands section of the Basin and Range physiographic province (Hedlund 1979:1) and in the Mimbres basin. The Mimbres River, which drains an area of about 2,462 sq km (1,530 sq miles), originates north of Santa Rita flowing southerly toward the Black Mountains then east and south into a closed basin south of Deming. Elevations in the watershed range from 3,098 m (10,165 ft) to 1,265 m (4,152 ft). The area is characterized by narrow valley floors separated by steep canyon walls. The lower portion of the basin is relatively flat with a slight slope to the south (Corps of Engineers 1978:1).

The Black Range and Mimbres Mountains form the Continental Divide. Streams on the eastern slope flow in the Rio Grande while those on the west flow into the Mimbres River. Paleozoic and Precambrian rocks exposed in tilted fault blocks on the east side are mantled with volcanic rocks and surficial fan deposits on the west side. Cretaceous and Tertiary rocks overlie Mesozoic and Paleozoic limestones, dolomite, sandstone, and shale, which were block-faulted in the Middle Tertiary (Hedlund 1979:1,5). West of the Mimbres River, the Pinos Altos Mountains are part of the Mogollon Volcanic Plateau and are composed of Miocene volcanic rocks (Ungnade 1965:131).

Soils and Plant Life

Soils at the Orosco homestead are classified as Sanloren-Majada variant. Sanloren soils are deep, well drained soils found on terrace remnants and ridges (Parham et al. 1979:85). Upper soils consist of up to 37 cm of clay loam and very cobbly clay overlying cobbly sand loam to very gravely sandy clay (Parham et al. 1979:152). Sanloren soils are not suited for agriculture other than pasture (Parham et al. 1979:92). In terms of wildlife habitat, these soils are rated very poor for shallow water areas and wetland wildlife; poor for grains and seed crops, grasses, and legumes; poor for wetland plants; fair for shrubs, openland wildlife, and rangeland wildlife; and good for wild herbaceous plants (Parham et al. 1979:110). Water is deep and large stones impede irrigation, terracing, and water diversion endeavors (Parham et al. 1979:141).

Paymaster soils near the river are somewhat more favorable for agriculture (Parham et al. 1979:97, 152). Soils to the west are Guy and Plack variant Guy soils. These are less favorable

than the Sanloren soils for wildlife habitat, erosion, and depth to water (Parham et al. 1979:137, 140, 146).

Native vegetation consists of cool season New Mexico feathergrass, pinion ricegrass, and squirrel tail; side oats grama, little bluestem, black grama, and blue grama summer grasses; forbes and winterfat (Lindley 1979:57). A wide variety of mammals and birds inhabit the Mimbres Valley (Findley et al. 1975; Hubbard 1978).

Climate

Grant County is semiarid with considerable variability in elevation resulting in a wide range of daily and annual temperatures. The northern and central portion of the county average 30.5 to 48.3 cm (12 to 19 inches) of annual precipitation with almost half falling from July through September when moist air from the Gulf of Mexico causes brief but heavy thundershowers. Spring and fall are relatively dry with a slight precipitation increase during winter. The average annual temperature is between 8.2 and 13.7 degrees Celsius, reaching the over 26 degrees in midsummer. The growing season is from mid-April through mid-October, 150 to 180 days (Houghton 1979:1).

Excavation

Methods

North-south and east-west base lines were established, and 2-by-2-m grids were laid out surrounding the structure and the trash pit (Fig. 3). An area 673 sq m was laid out around Structure 1 and 20 sq m around the trash pit. All surface artifacts in these two areas were recorded in 2-m units. Recording included counts by material type and function and occasional notations on temporally diagnostic characteristics. Only those artifacts (surface and excavated) that were unusual, of unknown function, or requiring further analysis were collected. The rest were left at the site. The Structure 1 datum was in the northwest corner of Grid 17N/101E. Elevations were measured from the northwest corner.

To define the perimeter walls of the structure (Fig. 4), a series of grids were surface stripped in a 10-cm level. A test pit (1-by-2 m) was placed in the north half of Grid 13N/104E to locate the floor. Exterior fill was removed by grid in 10-cm levels or in bulk until a wall or adobe was reached. After determining there was no stratigraphy within the structure, fill was removed as a unit to 5 cm above the floor. All fill was screened.

Surface artifacts in the grids surrounding the trash pit were similarly recorded. Dense brush was removed, and a 1-by-1-m test was placed at the center of the depression. The test was expanded laterally by one grid on each side after encountering a bed frame. When no floor was located, it was determined to be a trash or adobe pit, and a 1-m-wide trench was excavated to provide a profile of the feature.

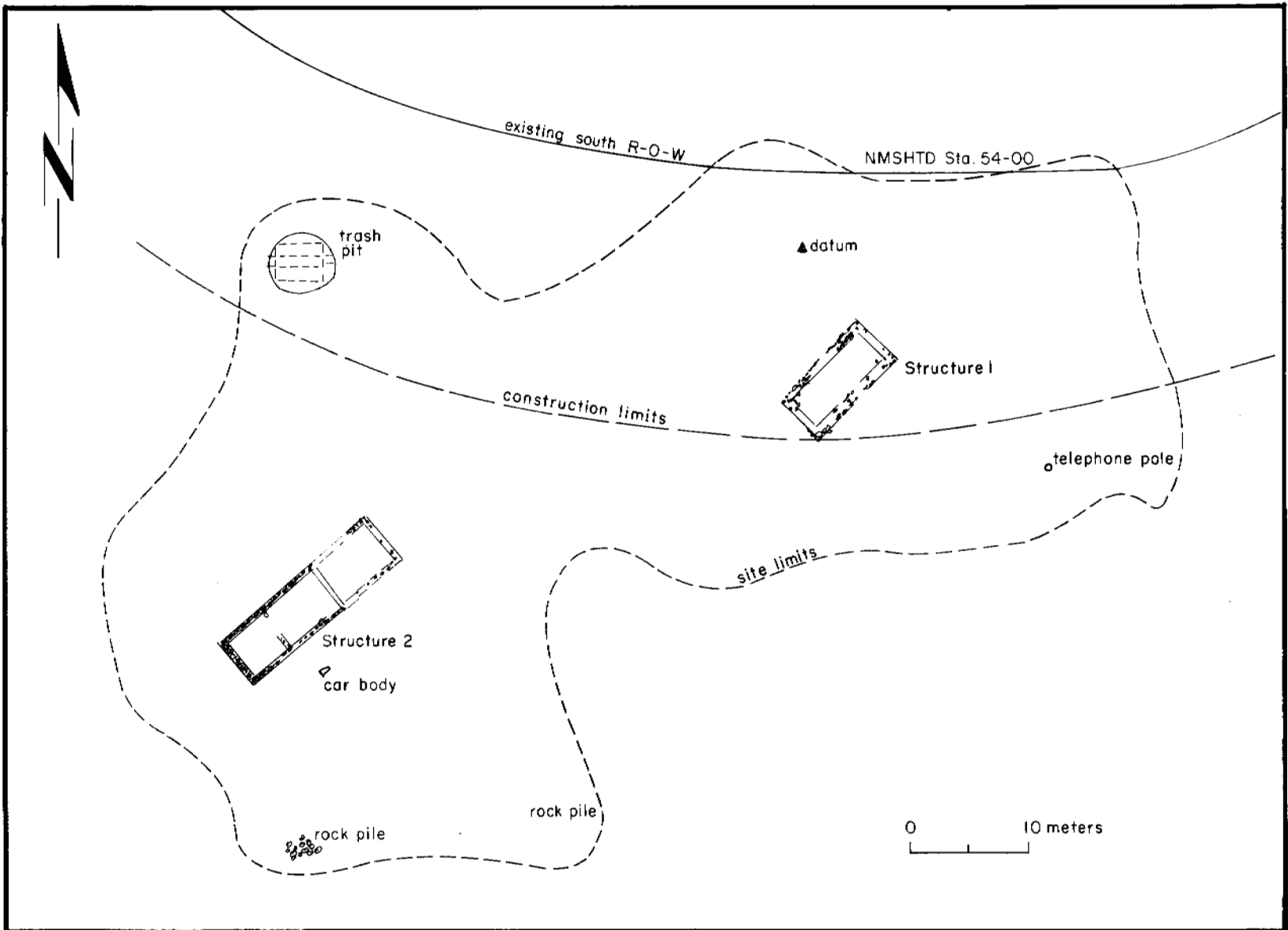


Figure 3. Site plan, LA 65895.



Figure 4. Structure 1 prior to excavation, LA 65895.

Structure 1

Fill outside of the structure was very dry, hard and rocky. Artifacts were sparse. White plaster backed by adobe was found in Grid 10N/101E as were areas of hard adobe, probably adobe wall fall. Fill inside the structure was dry clay with large wall fall rocks at about 20 cm below datum and softer soil beneath. A gravelly layer lay just above the floor. Charcoal, glass, adobe chunks with whitewash, burned adobe, and wood fragments were found in several interior grids. Rocks, especially those from the southeast corner, were coated with adobe plaster up to 1.8 cm thick.

The floor, at 36 to 39 cm below the present ground surface, was hard-packed clay that was fairly smooth except where disturbed by rodents. In some areas there were two floors, the upper floor missing in places. The fill between floors contained artifacts. There was also a built-up or raised area around the fireplace.

Structure 1 measured 9.75 by 4.0 m (Fig. 5). No trenching for a foundation was evident. Walls were poorly coursed with many rocks slipping out from the foundation. Construction was of unshaped pink granite with mud mortar and a few small chinking stones and mud plaster on the interior (Fig. 6). White plaster and adobe in the wall fall indicate the upper walls were plastered adobe. The adobe construction suggests that Structure 1 is the structure already present at the site when the Oroskos settled here.

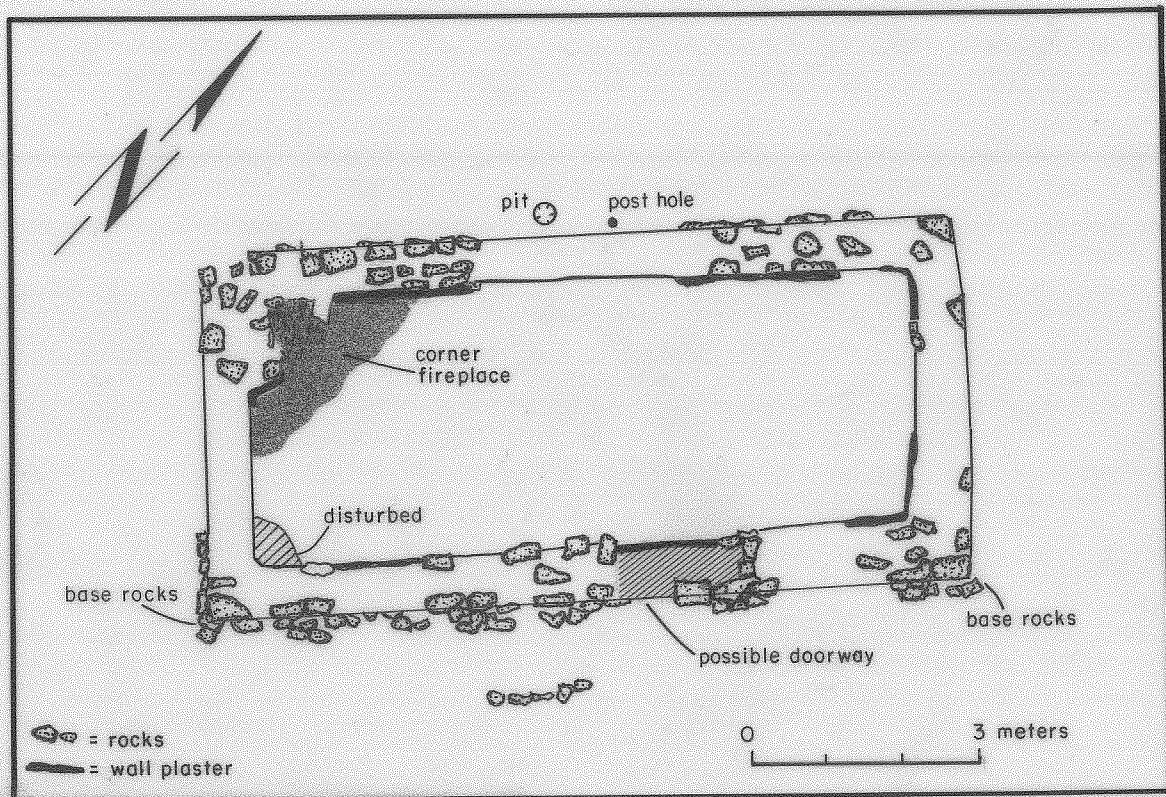


Figure 5. Plan of Structure 1.



Figure 6. Structure 1, detail of east wall.

The intact walls ranged from 60 cm (west wall) to 62 cm thick (east wall) (Fig. 7). Wall heights above the exterior surface were northeast 33 cm, southeast 38 cm, southwest 36 cm, and northwest 37 cm. Heights above the floor for the inside corners were northeast 38 cm, southeast 36 cm, and southwest 39 cm. A possible doorway consisting of a 163-cm-wide flat area with no foundation rock was located in the south wall. Roof tin observed nearby may have blown off this structure.

The only feature within the structure was a corner fireplace (Fig. 8). The opening measured 70 cm with plastered walls intersecting rocks incorporated into the wall. Fill was ashy oxidized soil and burned rock. Ashy buildup radiated out from the fireplace and a leather harness was found at 20 cm below datum.

The remains of an eight-spoke wagon wheel 1.09 m in diameter were found in Grid 12N/103E and other wagon-like parts in Grid 12N/104E. As detailed in the artifact assemblage section of this report, the bulk of the material recovered from the structure was domestic routine items (20.9 percent), construction/maintenance items (13.7 percent), barn or stable items (2.2 percent), and indeterminate (57.7 percent) items. The presence of maintenance items supports the excavator's interpretation of its use as barn or workshop. Manure, probably sheep, was found on the floor in Grid 12N/102E.

Outside the structure in Grid 12N/102E at 40 cm below the datum were a shallow pit containing artifacts (27.5 cm north-south, 30.1 cm east-west, and 10 cm deep) and a posthole (9 cm in diameter and 8.2 cm deep). A trash concentration with two military buttons was found in Grid 13N/105W at the level of the old ground surface.



Figure 7. Structure 1, after excavation.

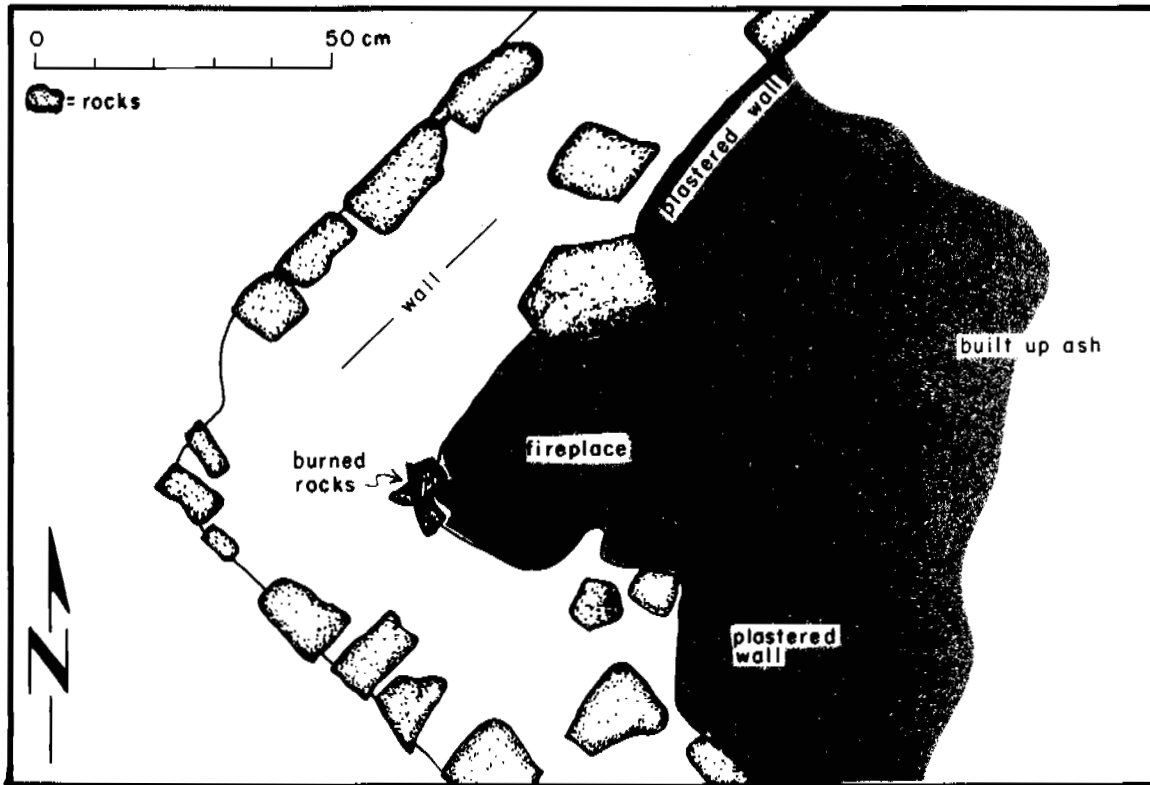


Figure 8. Plan of the fireplace, Structure 1.

Trash Pit

This 3.5-by-4.1-m depression (Fig. 9) originally appeared to be the remains of a dugout, a type of expedient structure often used by settlers while constructing a main house. A 1-by-1-m test within the depression was expanded when a bed frame was encountered and excavation could not continue without enlarging the test unit. In the larger test, an uneven compacted surface was found at 1.35 to 1.55 m below the subdatum. The east edge sloped up sharply suggesting a pit rather than a structure. A 1-m-wide trench was excavated across the pit to provide a profile (Fig. 10). The pit measured 2.75 m east to west; no north-south measurement was possible. The bottom was from .65 to a maximum of 1.86 m below the ground surface (Fig. 11).

The artifacts recovered from the trash pit are primarily domestic in nature. Domestic routine items comprise 27.0 percent of the assemblage and indeterminate objects (primarily indeterminate glass) 47.3 percent.

Unexcavated Structures

Outside the right-of-way are Structure 2 and a pile of rocks, possibly a privy. The three-room stone structure (Fig. 12) is probably that built by Cayetano Orosco in 1898. The trash pit appears to have been deposited during the occupation of Structure 2 since a trail of artifacts leads in that direction. The structure measures 10.2-by-4.7 m. The westernmost room has walls of large rocks, the middle room has walls of smaller rocks, and the eastern room has a few rocks with two posts



Figure 9. Trash pit before excavation.



Figure 10. Trash pit after excavation.

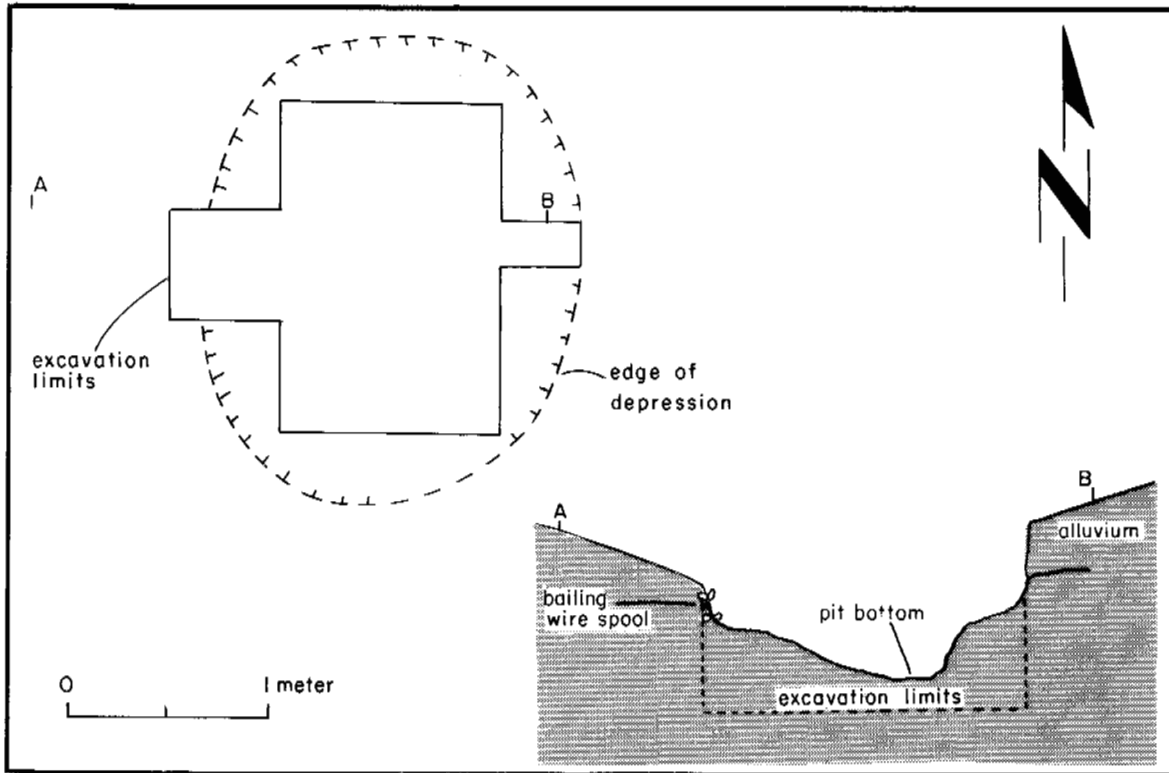


Figure 11. Plan and profile of trash pit.

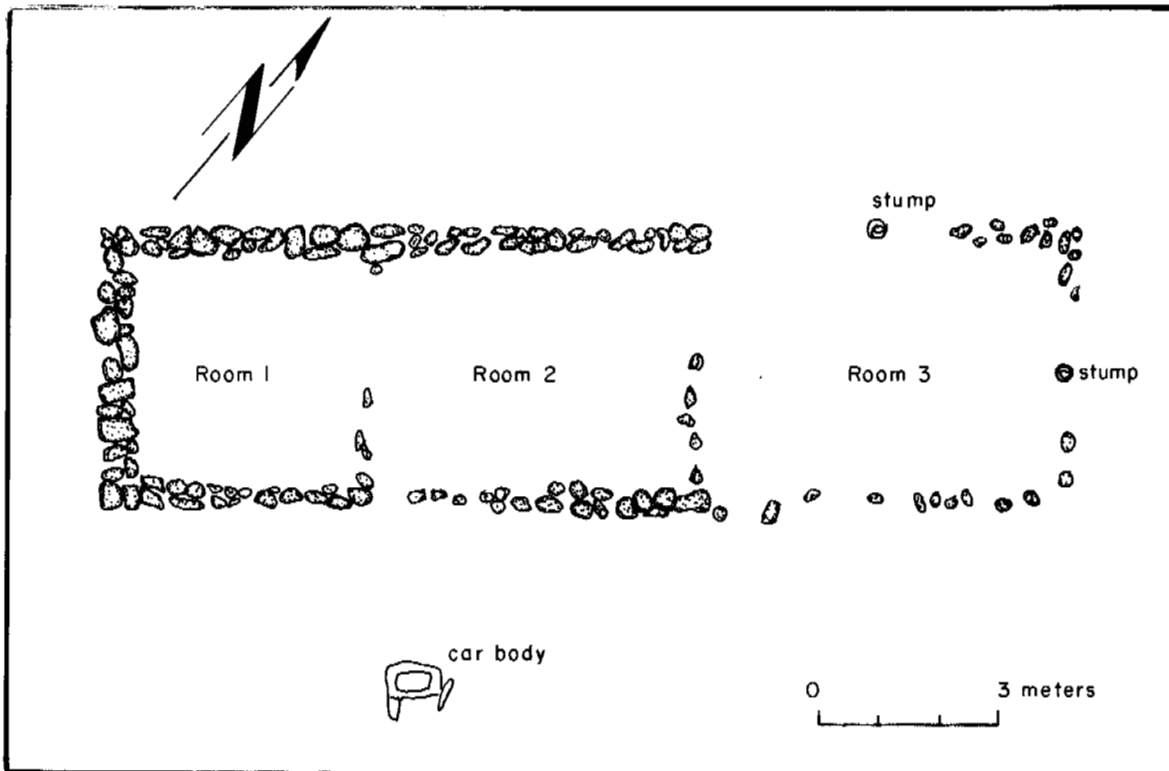


Figure 12. Plan of Rooms 1, 2, and 3.



Figure 13. Structure 2.

possibly indicating a fenced yard. Only one course is visible and the interior was filled with locust trees (Fig. 13). Artifacts noted on the interior surface include metal bars, a school desk leg, white ironware, purple glass, a biface, and two pieces of chipped stone. Outside were tobacco cans, hole-in-top cans, a horseshoe nail, Mason jars, purple glass, white ironware, clear glass, brown glass, milk glass, round nails, a few square nails, roof tin, and a hurricane lamp chimney. Most of the trash was on the north side with scattered trash near the southeast corner.

The possible privy consists of a pile of rocks measuring 2.13 m east-west by 2.2 m north-south and 25 cm high. No outline was discernable. Artifacts near the pile include a tobacco can, a metal bar, a heavy metal tube, a metal tool--possibly a stove grate, two pieces of milk glass, two of brown glass, three of aqua glass, and a shoe insole. No stream of trash led to this feature, as would be expected if it were a privy.

Acequia

About 2 km from Structure 1 is a portion of a modern-looking acequia. It runs underground except for a 5.13-m segment that exits from one and enters another 77-cm-wide galvanized pipe. The east side of the above-ground section has a wooden frame consisting of two pine boards (30-by-43 cm) extending under the water. The west side is formed by a concrete bridge base. The water is 40-cm deep and there are rocks on the bottom.

Cayetano Orosco claimed to dry farm, his only water came from a well, suggesting that the ditch postdates his attempts at agriculture or that it lies outside the homestead. The Heredia Ditch, which is in the same quarter-section as the Orosco homestead, was built around 1870 (Resettlement Administration 1936:8) and should have been close enough for use if Cayetano wanted irrigation water.

ARTIFACT ASSEMBLAGE

Most of the artifacts from LA 65895 were analyzed in the field. Only those requiring additional analysis or photography were collected and returned to the lab. Adisa Willmer analyzed and coded the collected artifacts and coded those analyzed in the field using an established Office of Archaeological Studies format based on artifact function (Hannaford and Oakes 1983; Oakes 1990). Variables coded include the field specimen number (for collected items), north and east grid designations, level, artifact function, condition of the artifact, beginning date, end date, count, material, and color. Several variables were recorded only for certain functions or materials. Data manipulations were carried out using SPSS, PC version.

A total of 3,320 artifacts were recorded. Table 6 gives the basic functional categories divided by general provenience. Foodstuffs are items related to storage, consumption, or processing of food. Indulgences include containers for liquid refreshment, medical items, and smoking paraphernalia. Domestic routine items are tableware, kitchen utensils, domestic furniture, household items, and lighting facilities. Construction/maintenance items include hardware and tools used in daily activities. Personal effects are items of clothing, adornment, grooming, and personal possessions. Entertainment/leisure items are game parts, musical instruments, and toys. Arms include ammunition and guns. Stable/barn implements are farm tools, stable, and barn equipment. When the function could not be determined, the artifact was placed in the indeterminate category (Oakes 1990:35). Transportation items are those related to modern forms of transportation.

Table 6. LA 65895 Distribution of Artifact Functional Groups by Provenience

Function	Structure 1		Structure 2		Trash Pit	
	n=	%	n=	%	n=	%
Foodstuffs	89	3.0			21	6.7
Indulgences	36	1.2	5	35.7	9	2.9
Domestic Routine	625	20.9	2	14.3	84	27.0
Construction/Maintenance	410	13.7			30	9.6
Personal Effects	30	1.0			8	2.6
Entertainment/Leisure	4	.1				
Arms	6	.2				
Stable/Barn	65	2.2			10	3.2
Transportation	1				2	.6
Indeterminate	1729	57.7	7	50.0	147	47.3
Totals	2995	100.0	14	100.0	311	99.9

Materials from within Structure 1 (n = 1,017), the exterior excavations (n = 465), and surrounding collection area (n = 1,513) are labeled Structure 1. Only a few potentially diagnostic items were collected from the vicinity of Structure 2. The trash pit includes the excavated (n = 176) and surrounding collection area (n = 118) materials.

There is some variation in the proportion of functional groups between the proveniences, probably related to the functions of these particular features. The trash pit assemblage contains proportionately more of all functional groups, including stable/barn items, even when the indeterminate objects are eliminated from consideration. The only functional group that Structure 1 has more of is construction/maintenance, which is consistent with the presence of a structure.

Foodstuffs

Tables 7 and 8 give the distribution of foodstuff items. Most are containers, generally cans, with some food items. Can varieties include hole-in-top (dating between 1814 and the early 1900s) (Fontana et al. 1962:68-69), sanitary cans (1897 to present, May 1937:439), slide-off lid cans, sardine cans (post-1866, Berge 1980:261), and key-strip openers (post-1895, Gilpin 1983:1028). A fragmentary baking powder lid was embossed with IGHT/ BAKING/ POWDER/ FOR /PURE, not quite enough to identify the maker. Two pint-sized lard cans from the same maker are marked IVORY BRAND/ LARD COMPOUND/ The Condan Pkg Co. O and Y BRAND/ COMPOUND/ on Pkg Co/ MAHA. Additional can fragments were considered indeterminate when it could not be determined if they held food. Can body fragments comprise an additional 5.9 percent of the Structure 1 and 10.9 percent of the trash pit assemblages. Locked and lapped seam fragments (.2 percent) and locked/lapped cans (.4 percent) are present in the indeterminate assemblage.

Datable glass containers include a Mason jar and olive oil bottle. Wide mouth Mason jars were manufactured between 1880 and 1917 (Berge 1980:42). The presence of few canning jars and canning-related materials is consistent with the ethnicity of the site's inhabitants. According to Jansen (1982:362), Hispanic women in New Mexico relied on drying rather than canning as their principal method of food preservation into the 1930s. Drying is inexpensive and efficient while jars and caps were expensive, and cold-pack canning required considerable time and effort. Corn, chile, onions, beans, squash, and meat were traditionally dried. Agricultural extension agents made little effort to teach Spanish-speaking women the art of canning prior to 1929 (Jansen 1982:365).

In contrast, the Ontiberos site, an Hispanic homestead near Roswell, occupied between 1903 and 1908, produced 120 fragments of Mason jars (1.98 percent of the artifact assemblage) (Oakes 1983a:124). The site's proximity to the larger town of Roswell or relative economic positions of the Ontiberos and Oroskos could account for the disparity.

A RE UMBERED BRAND/PURE OLIVE oil bottle dates between 1882 and 1930. Hull-Walski and Ayres (1989:162) date this trademark as post-1882. The bottle itself is aqua glass with numerous flaws suggesting a pre-1930 end date. As with cans, many glass containers and glass fragments have no determinable function. Indeterminate glass, glass containers, and bottles comprise approximately 45 percent of the Structure 1 and 32 percent of the trash pit assemblages.

Table 7. Structure 1 Foodstuffs (percent of artifact assemblage)

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Hole-in-top can					5	.3	5	.2
Lard can					6	.4	6	.2
Sanitary can					1	.1	1	.0
Slide-off can lid	1	.1					1	.0
Sardine can			20	4.3	5	.3	25	.8
Indeterminate cap					1	.1	1	.0
Rectangular can					1	.1	1	.0
Lard bucket					2	.1	2	.1
Baking powder lid					2	.1	2	.1
Mason jar or lid			4	.9	1	.1	5	.2
Peach pit	1	.1					1	.0
Egg shell	1	.1	1	.2			2	.1
Key-strip opener					1	.1	1	.0
Screw-on cap					1	.1	1	.0
Bone	20	2.0	11	2.4			31	1.0
Corn cob	1	.1					1	.0
Olive oil bottle	3	.3					3	.1
Totals	27	2.6	36	7.7	26	1.7	89	3.0

Table 8. Structure 2 and Trash Pit Foodstuffs and Indulgences (% of artifact assemblage)

	Structure 2		Trash Pit Area					
	n=	%	Surface		Subsurface		Total	
			n=	%	n=	%	n=	%
Hole-in-top can					1	.5	1	.3
Lard bucket					3	1.5	3	1.0
Bone					17	8.8	17	5.5
Total foodstuffs	0		0		21	10.9	21	6.7
Beer bottle	2	14.3	2	1.7	1	.5	3	1.0
Whiskey bottle	1	7.1						

	Structure 2		Trash Pit Area					
			Surface		Subsurface		Total	
	n=	%	n=	%	n=	%	n=	%
Medicine bottle	2	14.3			2	1.0	2	.6
Pharmacy bottle			2	1.7			2	.6
Soda bottle					1	.5	1	.3
Tobacco can lid			1	.6			1	.3
Total indulgences	5	35.7	5	4.2	4	2.1	9	2.9

Actual food items are a corn cob, peach pit, egg shell, and 48 pieces of bone. Table 9 lists the fauna found and proportions of those that are rodent or carnivore gnawed. The bulk of the assemblage is small fragments that cannot be identified except by size. Both wild and domestic species are present. Wild taxa include cottontail rabbit, jack rabbit, and squirrel. Domestic species are goat, sheep or goat, cow, chicken, and possible dog. The elements from wild species were all found in the trash pit (Table 10). Most of the identifiable domestic species are from within Structure 1. Bones from both features are often checked or exfoliated and a large proportion of those from the trash pit appear to have been boiled (52.9 percent). All sizes of animal had evidence of processing (Table 11). Knife cuts were observed on cottontail rabbit, domestic goat, medium to large artiodactyl, chicken, and large bird. A medium to large artiodactyl thoracic vertebra spine, sawn in three dimensions, is the only piece that suggests commercial butchering. Large mammal and medium artiodactyl elements have spiral fractures probably related to processing.

Table 9. Taxa and Summary of Observations

Taxon	Common Name/Size	Elements		Rodent Gnawed	Carnivore Gnawed
		n=	%	%	%
Small mammal/lrg. bird	rabbit, turkey size	2	4.2		
Medium-large mammal	dog to cow size	4	8.3		
Large mammal	sheep or larger	11	22.9	27.3	27.3
<i>Sylvilagus</i> sp.	cottontail rabbit	7	14.6		
<i>Lepus</i> sp.	jack rabbit	1	2.1		
Sciuridae	large squirrel or prairie dog	1	2.1		
Large carnivore	large dog or larger	1	2.1		
cf. <i>Capra hircus</i>	domestic goat	2	4.2		50.0

Taxon	Common Name/Size	Elements		Rodent Gnawed	Carnivore Gnawed
		n=	%	%	%
<i>Ovis/Capra</i>	domestic sheep or goat	2	4.2		50.0
<i>Bos taurus</i>	cow	1	2.1		
Medium artiodactyl	sheep to deer size	10	20.8		
Medium-large artiodactyl	sheep to cow size	1	2.1	100.0	
<i>Gallus gallus</i>	domestic chicken	4	8.3	50.0	25.0
Large bird	goose or turkey size	1	2.1	100.0	
Totals		48	100.1	14.6	12.5

Table 10. Fauna by Feature

Taxon	Structure 1				Trash Pit	
	Interior		Exterior		n=	%
	n=	%	n=	%		
Small mammal/large bird	2	10.0				
Medium-large mammal	2	10.0			2	11.8
Large mammal	9	45.0			2	11.8
<i>Sylvilagus</i> sp.					7	41.2
<i>Lepus</i> sp.					1	5.9
Sciuridae					1	5.9
Large carnivore			1	9.1		
cf. <i>Capra hircus</i>	2	10.0				
<i>Ovis/Capra</i>	2	10.0				
<i>Bos taurus</i>	1	5.0				
Medium artiodactyl			10	90.9		
Medium-large artiodactyl					1	5.9
<i>Gallus gallus</i>	2	10.0			2	11.8
Large bird					1	5.9
Totals	20	100.0	11	100.0	17	100.2
Rodent gnawed	2	10.0			5	29.4
Carnivore gnawed	5	25.0			1	5.9

Taxon	Structure 1				Trash Pit	
	Interior		Exterior		n=	%
	n=	%	n=	%		
Root etched	1	5.0				
Checked/exfoliated	12	60.0	10	90.1	9	52.9
Probably boiled	1	5.0			9	52.9

Table 11. Processing by Taxa

Taxon	Sawing	Knife Cuts	Spiral Fractures
Large mammal			4
<i>Sylvilagus</i> sp.		2	
cf. <i>Capra hircus</i>		1	
Medium artiodactyl		3	3
Medium-large artiodactyl	1		
<i>Gallus gallus</i>		3	
Large bird		1	
Totals	1	10	7

Indulgences

Beer bottles are the most common indulgence item in both the Structure 1 and trash pit assemblages (Tables 8, 12). The majority are brown glass (post-1873, Wilson 1981:1). Two embossed bottle bottoms are marked "& CO" along the edge and "29" at the center. An applied finish dating between 1870 and 1920 (Rock 1980:9) and a bottom with an American Bottling Co. insignia dating between 1905 and 1921 (Hulls-Walski and Ayres 1989:69) and the number 62 complete the assemblage.

Two whiskey bottle fragments are purple or amethyst glass (1880-1925, Newman 1970:74), one each from Structure 1 interior excavations and the surface near Structure 2. The finish and neck portion of an amber medicine bottle dates after 1860 (Fike 1987:13). The remaining medicine bottle fragments are white with a handmade finish (n = 1), clear (n = 2), purple (n = 3), and aqua (n = 5). One clear piece, probably a bottom, has ATED/ SE/ NE/ 68 embossed on the bottom. Another is a purple front with LIN'S/ RD OIL representing HAMLIN'S/ WIZARD OIL. Clear glass bottles sold by this company were labeled "Hamlin's Wizard Oil Liniment. 65% Alcohol, Soothing, Healing. A Superior Counter-Irritant, Strongly Antiseptic. Copyright 1902" (Fike 1987:193, fig. 61).

Table 12. Structure 1 Indulgences (percent of artifact assemblage)

	Interior		Exterior		Collection Area		Area Total	
	n =	%	n =	%	n =	%	n =	%
Beer bottle	1	.1			18	1.2	19	.6
Whisky bottle/flask	1	.1					1	.0
Soda bottle					1	.1	1	.0
Tobacco can	1	.1			2	.1	3	.1
Tobacco can lid					4	.3	4	.1
Medicine bottle			1	.2	6	.4	7	.2
Mentholatum jar					1	.1	1	.0
Total	3	.3	1	.2	32	2.1	36	1.2

Fragments identifiable as soda bottles are rare. One with a "BIG" horizontally across the body may refer to "BIG BILL" or "BIG BOY" soda introduced in 1936 (Paul and Parmalee 1973:120).

Tobacco can parts were found in Structure 1, around Structure 1, and on the surface near the trash pit. The collected specimen is a United States Tobacco Company snuff can lid dating after 1922 (Hull-Walski and Ayres 1989:177).

Domestic Routine

Domestic routine items are largely Euroamerican ceramics (Tables 13 and 14). Ironware is the most common domestic routine item in both the Structure 1 proveniences and the trash pit. Lesser amounts of earthenware, porcelain, and bisque were recorded.

Earthenware (opaque, nonvitreous, porous clay, Berge 1980:177) fragments, were found in both areas. Proportionately, the trash pit area had slightly more (1.9 as compared to .8 percent). Bowl and crock forms were identified. Colors include brown, yellow, yellow with black, and clear glaze (Table 15).

Ironware, a thick, heavy utilitarian type of stoneware (nonporous and nontranslucent; Berge 1980:189-190), was found in cup, plate, and saucer forms. It was slightly more common in the trash pit area (20.5 percent of the total assemblage) than in and around Structure 1 (17.3 percent). All were white with a variety of motifs (Table 15).

Five pieces of ironware have manufacturers' marks (Fig. 14). Three are Homer Laughlin China Company hotel wares dating ca. 1880 to 1900, ca. 1901 to 1915, and around 1900 (Gates and Ormerod 1982:135; Lehner 1988:247). Homer Laughlin manufactured fine white ironstone

Table 13. Structure 1 Domestic Routine Objects (percent of artifact assemblage)

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Earthenware bowl			1	.2	11	.7	12	.4
Earthenware crock					4	.3	4	.1
Indeterminate earthenware	1	.1	4	.9	4	.3	9	.3
Ironware cup	4	.4			13	.8	17	.6
Ironware plate	3	.3	1	.2	17	1.1	21	.7
Ironware saucer					1	.1	1	.0
Indeterminate ironware	53	5.2	61	13.1	364	24.1	478	16.0
Indeterminate porcelain	2	.2			21	1.4	23	.8
Indeterminate stoneware					1	.1	1	.0
Indeterminate bisque	1	.1					1	.0
Bisque figurine fragment					1	.1	1	.0
Fork	1	.1					1	.0
Spoon					1	.1	1	.1
Sugar shell spoon	1	.1					1	.0
Drinking glass					1	.1	1	.0
Glass cup	6	.6					6	.2
Porcelain figurine fragments					2	.1	2	.1
Pressed glass	2	.2	1	.2	5	.3	8	.3
Painted glass					1	.1	1	.0
Basin	1	.1					1	.0
Blue splatter tin cup					1	.1	1	.0
Pen nib	2	.2					2	.1
Grommet			1	.2			1	.0
Furniture caster					2	.1	2	.1
Bed/couch spring	1	.1					1	.0
Bucket handle					5	.3	5	.2
Cast iron stove leg	2	.2					2	.1
Stove part			1	.2	2	.1	3	.1
Kerosene lamp part			5	1.1	6	.4	11	.4

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Scissors					1	.1	1	.0
Log tongs	1	.1					1	.0
Singer sewing machine emblem					1	.1	1	.0
Cast iron fry pan			1	.2	2	.1	3	.1
Metal strainer			1	.2			1	.0
Total	81	8.0	77	16.6	467	31.0	625	20.9

Table 14. Structure 2 and Trash Pit Domestic Routine Objects (percent of artifact assemblage)

	Structure 2		Trash Pit Area					
	n=	%	Surface		Subsurface		Total	
			n=	%	n=	%	n=	%
Earthenware bowl			1	.8			1	.3
Indeterminate earthenware			1	.8	4	2.1	5	1.6
Ironware cup			1	.8	1	.5	2	.6
Ironware plate	1	7.1			1	.5	1	.3
Indeterminate ironware	1	7.1	20	16.9	41	21.2	61	19.6
Spoon					1	.5	1	.3
Pressed glass					2	1.0	2	.6
Painted glass					1	.5	1	.3
Wash tub					2	1.0	2	.6
Blue tin bowl			1	.8			1	.3
Blue tin pan lid			1	.8			1	.3
Bed frame part					1	.5	1	.3
Cast iron desk leg			2	1.7			2	.6
Kerosene lamp part			2	1.7			2	.6
Stove part			1	.8			1	.3
Total domestic routine	2	14.3	30	25.4	54	30.0	84	27.0

Table 15. Euroamerican Ceramic Colors and Patterns (when recorded)

	Earthenware		Ironware		Porcelain	
	n=	%	n=	%	n=	%
White			537	92.9	4	17.4
White with:					12	52.2
oriental design			7	1.2		
black design/mark			4	.7		
blue floral			7	1.2		
green and orange floral			9	1.6		
floral			1	.2		
brown leaf			1	.2		
scalloped edge			1	.2	4	17.4
gold trim			11	1.9	1	4.3
embossed/raised design						
Brown	2	9.1				
Yellow	11	50.0				
Light green					1	4.3
Yellow-green					1	4.3
Rust	4	18.2				
Yellow with black	4	18.2				
Clear glaze	1	4.5				
Totals	22	100.0	578	100.1	23	99.9

in East Liverpool, Ohio after 1877, relocating across the river in Newell, West Virginia, in 1929. By 1914 the company manufactured semivitreous dinner, hotel, and toilet wares (Gates and Ormerod 1982:128). Hotel ware, manufacturer not identified, was available as open stock from Sears and Roebuck in 1900 and 1902. Regular dinnerware was sold by the set (Sears, Roebuck 1969:797 and 1970:1090). By 1909, Homer Laughlin dinnerware was available through Sears and Roebuck by the piece (Sears, Roebuck 1979:120-123).

The fourth manufacturers' mark is a British royal arms with an oval center and a lion and a unicorn on either side. It is incomplete but strongly resembles the Alfred Meakin mark from Tunstall and Staffordshire, England, used on earthenware from 1873 on (Kovel and Kovel 1986:12). To overcome a preference for English pottery, this and other familiar British symbols were commonly used to mark American ironstone made throughout the late 1880s (Gates and Ormerod 1982:9; Kovel and Kovel 1986:267). The piece could be either English or American.

The final piece is ironware with "porcel" in blue. The body of the sherd is porous making it an ironware rather than porcelain (see Gates and Ormerod 1982:8).

Porcelain (translucent and highly vitrified from firing at a high temperature, Berge 1980:209) was rare. Only 23 pieces were found in and around Structure 1 and none was observed

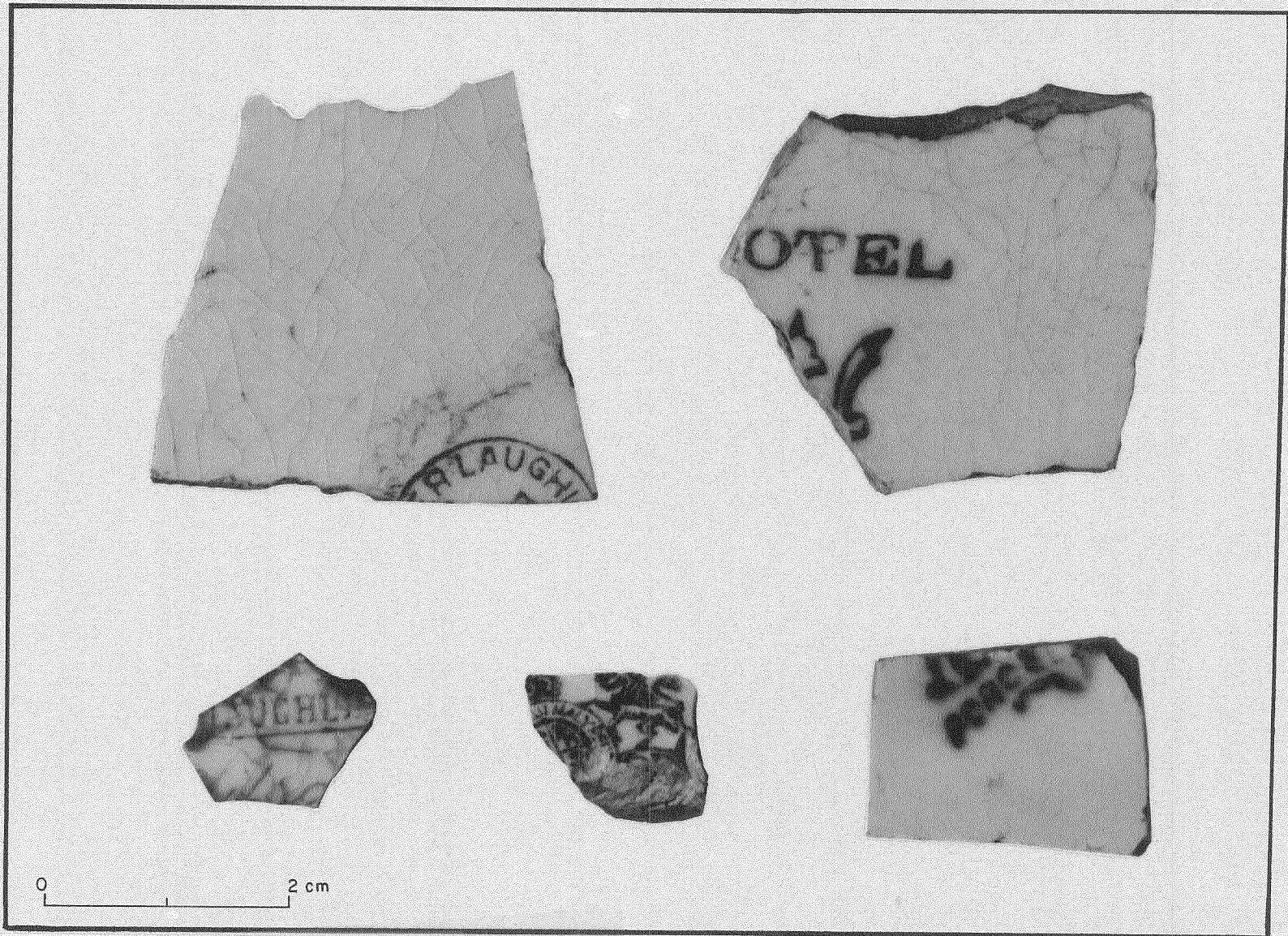


Figure 14. Manufacturers' marks on ironstone.

in the trash pit area. Colors include white, green, and oriental design. Four have gold trim and one has a raised design (Table 15). The figurine fragments are an animal foot and part of a woman.

Few pieces of hard porcelain or china were produced outside China before 1900 (Berge 1980:210). Soft paste European porcelain or bone china was made in England after 1820 and slightly later in the United States (Habicht-Mauche 1988:17). Seventeen pieces from LA 65895 were recorded in the field as "Chinese porcelain" implying a hard paste variety.

One ceramic fragment was identified as stoneware. It has a salt glaze exterior and an Albany slip on the interior. Stoneware is more granular than porcelain, translucent, but not porous--unlike earthenware (Berge 1980:189).

The remainder of the domestic routine objects include an array of eating utensils, cooking equipment, and household items (Tables 13 and 14). Few of these provide information on occupation dates. Four of the kerosene lamp parts are purple glass chimney fragments dating between 1880 and 1925 (Fike 1987:13).

Construction/Maintenance

Construction and maintenance items comprise 13.7 percent of the Structure 1 assemblage and 9.6 percent of the trash pit contents (Tables 16 and 17). Nails (5.2 percent), sheet glass (1.4 percent), and wood fragments (2.5 percent) make up much of the construction/maintenance items from Structure 1 (9.1 percent as compared to 4.8 percent of the trash pit assemblage).

Two possible hand wrought nails, one framing and one box, were recorded in the field. Both were from the floor of Structure 1. Cut, square cut, and wire nails were also recovered. Wire nails outnumber cut nails in the Structure 1 assemblage (94 to 45) while cut nails outnumber wire nails in the trash pit assemblage (8 to 5). Cut nails have been made since around 1790 and are still made today. Those manufactured after 1830 are virtually indistinguishable from modern cut nails (Nelson 1968:8-9). The first United States wire nail factories were established in the 1850s. Wire nails did not become the dominant nail type until the 1890s (Nelson 1968:10-11).

Structure 1 (Table 16) contained a variety of construction and maintenance items: wire, nuts and bolts, cotter pins, etc. Tools include a small hand auger with a wooden handle, a claw hammer, tack hammer, wrench, chisel, and maul (Fig. 15). Baling wire was the most common construction/maintenance item from the trash pit area (2.6 percent). Tin roofing, sheet glass, and nails were also found (Table 17).

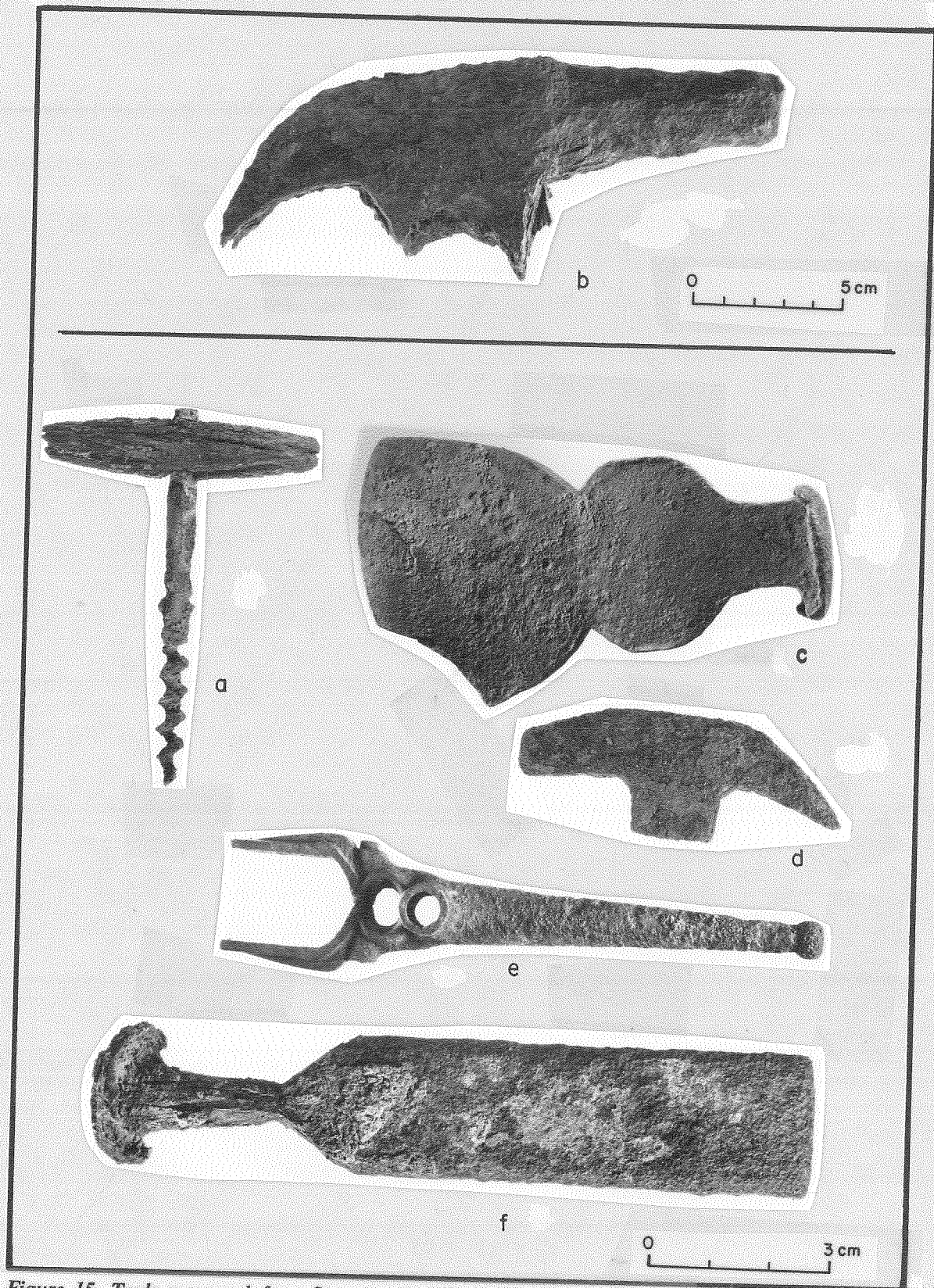


Figure 15. Tools recovered from Structure 1: (a) hand auger, (b) claw hammer, (c) maul, (d) tack hammer, (e) wrench, (f) chisel.

Table 16. Structure 1 Construction/Maintenance Objects (percent of artifact assemblage)

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Indeterminate framing nail	14	1.4					14	.5
Indeterminate finishing nail					1	.1	1	.0
Indeterminate nail	8	.8					8	.3
Cut box nail	11	1.1	2	.4			13	.4
Indeterminate cut nail			1	.2			1	.0
Square cut finishing nail	1	.1					1	.0
Square cut framing nail	26	2.6	2	.4	2	.1	30	1.0
Wire box nail	14	1.4	5	1.1	8	.5	27	.9
Wire framing nail	51	5.0	6	1.3	10	.7	67	2.2
Indeterminate tack			2	.4			2	.1
Fencing staple	4	.4	1	.2	2	.1	7	.2
Indeterminate staple	2	.2					2	.1
Wire	7	.7	3	.6	3	.2	13	.4
Bailing wire	8	.8	5	.8	8	.5	21	.7
Barbed wire	1	.1			2	.1	3	.1
Rubber covered wire					2	.1	2	.1
Indeterminate bolt	17	1.7					17	.6
Carriage bolt	9	.9			1	.1	10	.3
Large bolt	7	.7					7	.2
Indeterminate nut	10	1.0					10	.3
Large nut	4	.4	1	.2			5	.2
Large washer	3	.3	1	.2			4	.1
Indeterminate screw	2	.2					2	.1
Indeterminate washer	1	.1					1	.0
Wood screw	1	.1					1	.0
Hinge	1	.1					1	.0
Ornate iron lock plate	2	.2					2	.1
Ornate iron door knob plate			1	.2			1	.0
S-hook	1	.1					1	.0

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Mechanics hand auger	1	.1					1	.0
Auger nail	1	.1					1	.0
Paint can lid					1	.1	1	.0
Claw hammer					1	.1	1	.0
Hatchet					1	.1	1	.0
Tack hammer	1	.1					1	.0
Sheet glass (aqua)	29	2.9	7	2.9	6	.4	42	1.4
Wrench					1	.1	1	.0
Valve handle	1	.1					1	.0
Metal latch	1	.1	1	.2			2	.1
Spade					1	.2	1	.0
Corrugated tin roofing	1	.1					1	.0
Wood fragments	66	6.5	9	1.9			75	2.5
Maul part	1	.1					1	.0
Indeterminate tool	1	.1					1	.0
Well pump part	1	.1					1	.0
Cotter pin	2	.2					2	.1
Chisel part	2	.2					2	.1
Totals	313	30.8	47	10.1	50	3.3	410	13.7

Table 17. Trash Pit Construction/Maintenance, Personal Effects, Stable/Barn, and Transportation Items (percent of artifact assemblage)

	Surface		Subsurface		Total	
	n=	%	n=	%	n=	%
Cut box nail			3	1.5	3	1.0
Indeterminate cut nail			1	.5	1	.3
Square cut framing nail			4	2.1	4	1.3
Wire framing nail	1	.8	4	2.1	5	1.6
Fencing staple			3	1.5	3	1.0
Bailing wire			8	4.1	8	2.6

	Surface		Subsurface		Total	
	n=	%	n=	%	n=	%
Indeterminate screw			2	1.0	2	.6
Plaster wire			1	.5	1	.3
Tin roofing	1	.8			1	.3
Aqua sheet glass			2	1.0	2	.6
Total construction/maintenance	2	1.7	28	14.5	30	9.6
Rubber shoe sole			2	1.0	2	.6
Plastic comb	1	.8	1	.5	2	.6
Cosmetic tin			1	.5	1	.3
Levi-style pant rivet	1	.8			1	.3
Overall button			2	1.0	2	.6
Total personal effects	2	1.7	6	3.1	8	2.6
Draft horseshoe	1	.8	1	.5	2	.6
Horseshoe nail			1	.5	1	.3
Hames	4	3.4			4	1.3
Riveter	1	.8			1	.3
Indeterminate wagon parts	2	1.7			2	.6
Total stable/barn	8	6.8	2	1.0	10	3.2
License plate pieces [NM 1930]			2	1.0	2	.6
Total transportation			2	1.0	2	.6

Personal Effects

Personal effects are rare in both the Structure 1 and the trash pit assemblages, comprising a larger proportion of the trash pit collection (2.6 as compared to 1.0 percent) (Tables 17 and 18). Included are rubber shoe soles and a man's nail-on variety leather heel. Combs from Structure 1 are rubber while those from the trash pit are plastic. Fasteners consist of a buckle, suspender hook, snaps, a metal four-hole trouser button, metal buttons with back attachments, pearl buttons, hook and eyes, a Levi-like rivet, and an overall button.

Table 18. Structure 1 Personal Effects (percent of artifact assemblage)

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Rubber shoe sole	1	.1					1	.0
Leather shoe heel	1	.1					1	.0
Buckle	2	.2			1	.1	3	.1
Suspender hook	1	.1					1	.0
Clothing snap					1	.1	1	.0
Metal four-hole button (17 mm)			1	.2			1	.0
Military button	5	.5					5	.2
Metal button with back attachment			1	.2			1	.0
Pearl two-hole button	1	.1	1	.2			2	.1
Hook and eye	1	.1			1	.1	2	.1
Rubber comb					2	.1	2	.1
Needle	1	.1					1	.0
Straight razor	1	.1	1	.2			2	.1
Vaseline jar			2	.4			2	.1
Salve tin			1	.2			1	.0
Cold cream jar					1	.1	1	.0
Perfume bottle	1	.1					1	.0
Coin or token	1	.1					1	.0
Gold-plated ring	1	.1					1	.0
Total personal effects	17	1.7	7	1.5	6	.4	30	1.0

The salve can has a slide on cap and is 40 mm in diameter by 9 mm tall. The finger ring probably belonged to a man. It has a thin wash of gold over a copper alloy band. The "stone" is a rounded rectangle measuring 7-by-11 mm and a silver-gray platy substance, possibly pewter. The stone and surrounding band have striations indicating it was hand-filed after the stone was inserted. On the interior is a mark that resembles the number five inside a diamond.

The military buttons (Fig. 16) are from Structure 1 (Grids 13N/104E, 13N/105E, and 14N/104E, Levels 3, 4, or 5). One button is a three-piece "Prussian Eagle" with a line shield manufactured by Horstman Bros Co. of Philadelphia and measures 11 mm. Line shields were standard on enlisted men's uniforms between 1833 and 1902 (Gillio et al. 1980:24). The Prussian



Figure 16. Military buttons found at LA 65895.

eagle was used between 1880 and 1902. It is rarely found in the Southwest, possibly because it was issued late in the Indian War period (Wyckoff 1984:73-74).

The other four buttons are identical, a lined shield with a "symmetrical spread eagle." They are 12 mm in diameter and "J. H. Wilson/ Phila" marks the backs. Wyckoff (1984:88-89) dates these between 1847 and 1880 noting that they were expediently produced during the Mexican War and were the standard for enlisted men from 1854 until around 1880. Herskovitz (1978:41) dates the symmetrical spread eagle buttons manufactured by J. H. Wilson at 1873 to 1904. Of the 140 coat buttons found at Fort Bowie, Arizona (1862 to 1894), only 11 were made by J. H. Wilson. Horseman Bros. coat buttons were common (79 of 140 coat buttons) (Herskovitz 1978:40). The symmetrical spread eagle buttons outnumber the Prussian eagle buttons four to one in the Fort Bowie assemblage (Wyckoff 1984:89).

These buttons could have been obtained by the Orosco family in a number of ways. An item of clothing could have been acquired or the buttons may have been picked up at abandoned Fort Webster, located just across the river from San Lorenzo, if Wychoff's dates are correct. Fort Webster was occupied from September of 1852 through December of 1853 (Myers 1968:7-8). If Herskovitz's dates are valid, Fort Webster predates the manufacture of the buttons. Another possibility is purchase. The 1902 Sears and Roebuck catalog sold officers' plated brass buttons by the dozen (1969:940). It is unlikely that Cayetano Orosco was in the military, especially if he arrived in the United States in 1869. His name does not appear in the Alphabetical Index Cards of New Mexico Volunteer Union Soldiers (UNM Special Collections). However, he could have gotten an item of clothing from someone who had served in the volunteer army during the Civil War. By February of 1862, 2,800 New Mexico residents, mostly Hispanics, joined the army because of attractive soldiers' pay and enlistment bonuses. At the time, soldiers received better

pay than laborers working for wages. Enlisted men most often identified their occupation as laborer but others were herders, farmers, shoemakers, teamsters, carpenters, tailors, and musicians. Many of the Hispanics were born in Chihuahua and Sonora and ranged in age from 18 to 45 years. Spanish-speaking officers, usually from wealthier families, helped overcome communications problems with a force that could not speak English (Miller 1979:109-111). Other Hispanics were employed by the army, then the largest employer in the territory, as teamsters, laborers, herders, laundresses, spies, and guides (Miller 1979:116-117).

A purple patinated vaseline jar fragment has "CHESE /VAS" on the bottom, probably CHESEBROUGH MFG CO/ VASELINE. Similar bottles were recovered from 1870 to 1890 deposits at Fort Laramie (Wilson 1981:181) and from Fort Bowie (Herskovitz 1978, fig. 5d).

The cosmetic tin is a round hinged container 39 mm in diameter and 10 mm deep (Fig. 17) with "*Plough's*/ BLACK AND WHITE/ Beauty Creations/ MADE IN U.S.A." impressed on the bottom. A cold cream jar is milk glass with a raised "W T CO./ M/ U.S.A.," made by Whitall-Tatum between 1857 and 1938 (Toulouse 1971:544). Pieces from a clear bottle recovered near Structure 2 were embossed with "S HINDS C/ ▼ U," "HONE" and "EAM," possibly "HINDS HONEY & ALMOND CREAM" sold to druggists by Hinds between 1870 and 1925 (Toulouse 1971:54). Other personal effects are a needle, straight razor blades, and a copper coin or token 29 mm in diameter.

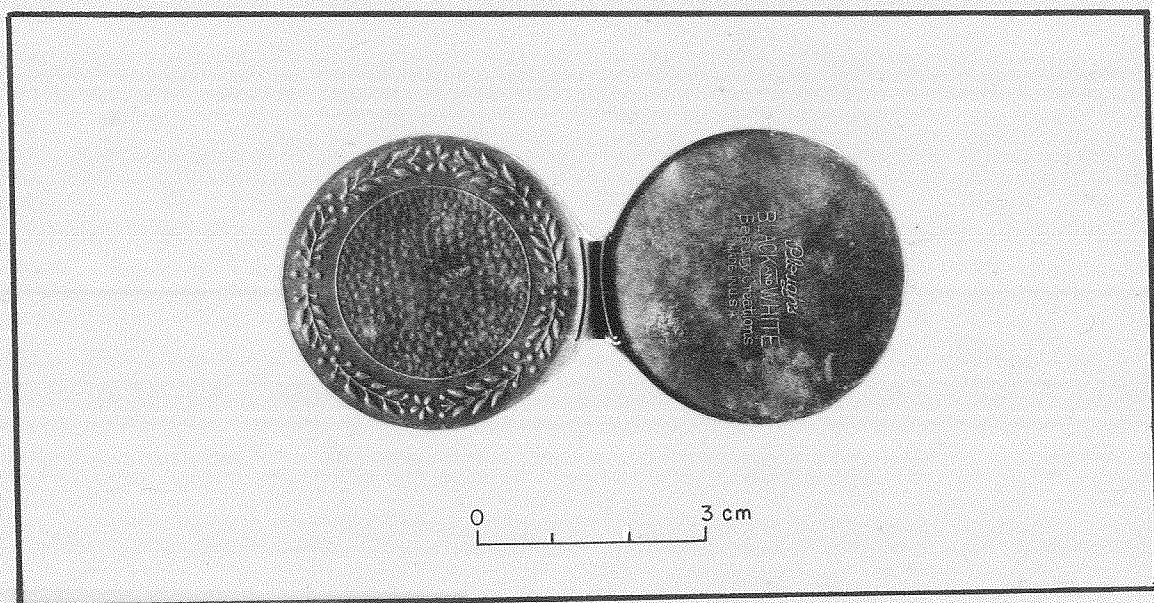


Figure 17. Cosmetic tin.

Entertainment/Leisure

Entertainment and leisure items were exceedingly rare (Table 19). None were found in the trash pit area. Two ceramic marbles and harmonica parts were found in and around Structure 1. Both marbles are clay. The surface find is a fragment of a mottled blue glazed marble just over 17 mm in diameter. A complete marble from the fill of the structure is mottled hot pink and 14 mm in diameter. Single-colored clay marbles were made in Germany as early as the eighteenth century. Clay marbles were produced in the U.S. between 1894 and 1918 (Randall 1977:4).

Table 19. Structure 1 Entertainment/Leisure, Armaments, and Transportation Items (percent of artifact assemblage)

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Ceramic marble	1	.1			1	.1	2	.1
Harmonica part	2	.2					2	.1
Total entertainment/leisure	3	.3			1	.1	4	.1
10-gauge shot gun shell	1	.1			1	.1	2	.1
.30 Remington centerfire	1	.1					1	.1
.45 Colt					1	.1	1	.0
.351 self-loading	1	.1					1	.0
Percussion cap	1	.1					1	.0
Total arms	4	.4			2	.1	6	.2
Battery core (24 mm diameter)	1	.1					1	.0
Total transportation	1	.1					1	.0

Arms

Shell casings were restricted to Structure 1 and its surrounding collection area (Table 19). Among these was a percussion cap or small copper cup filled with fulminate and placed on a hollow tube that when struck by the hammer releases burning fulminate into the powder charge (Rosa 1985:27). Percussion caps were made after 1840 (Rosa 1985:15). The shot gun shells were 10 gauge "Winchester/Nublack" and "W. R. A. Co./RIVAL."

Cartridge marks include "REM UMC/30 USA" for a rifle introduced between 1906 and 1912 and has not been made since World War II (Barnes 1985:48). Another, marked "WRA Co./351 S.L.," is from a Winchester self-loading rifle introduced in 1907 and discontinued after 1957

(Barnes 1985:69). The last is a "PETERS/45 COLT" for a hand gun introduced between 1873 and 1875. The Colt became the official gun of the U.S. Army in 1892 (Barnes 1985:200). Ammunition for all three armaments is still made (Barnes 1985).

Stable/Barn

Stable and barn objects are found in both Structure 1 and the trash pit assemblages. These are listed in Tables 17 and 20. Machine-forged horseshoes, horseshoe nails, and various tools demonstrate that maintenance and repair of horse and wagon related items took place at the site,

Table 20. Structure 1 Stable/Barn Implements (percent of artifact assemblage)

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Horseshoe (riding)	1	.1					1	.0
Horseshoe (draft)	2	.2			3	.2	5	.2
Horseshoe nail	4	.4	2	.4	2	.1	8	.3
Hames	1	.1					1	.0
Harness part	6	.6					6	.2
Harness rivet	1	.1					1	.0
Harness strap	4	.4					4	.1
Harness buckle	4	.4					4	.1
Harness buckle and strap					1	.1	1	.0
Riveter	1	.1					1	.0
Farrier's hammer bit					1	.1	1	.0
Horseshoer's driving hammer	1	.1					1	.0
Indeterminate wagon parts	3	.3					3	.1
Bolster plates	2	.2					2	.1
Single tree clip					1	.1	1	.0
Wagon wheel	1	.1					1	.0
D-ring	1	.1					1	.0
Wagon wheel rivet	15	1.5					15	.5
Cinch ring	1	.1					1	.0
Leaf spring	1	.1					1	.0

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Agricultural machine parts	5	.5					5	.2
Clevis	1	.1					1	.0
Total stable/barn	55	5.4	2	.4	8	.5	65	2.2

Transportation

possibly in Structure 1. This is not surprising given the distance from town and the economic status of the family. The 1902 Sears and Roebuck catalog (1969:612) offers complete kits for shoeing at \$2.65 and \$4.75. Similar kits were available to "farmers, stockmen and planters" for repairing household and farm equipment (Sear, Roebuck and Co. 1969:613).

Three modern transportation items were recovered (Tables 17 and 19). These include the graphite core of an automobile battery and two pieces of the same 1930 New Mexico license plate (number 37-969). The presence of numerous horse and wagon related objects compared with the few automobile related articles suggest that modern transportation was a late addition to the Orosco household.

Indeterminate

Items with no determinable function are by far the most common (Tables 21 and 22). Glass fragments are the most common (44.5 and 30.9 percent of the indeterminate items in the Structure 1 and trash pit assemblages) and could represent food, indulgence, domestic routine, construction, or leisure items. Table 23 gives the distribution of glass by color and provenience. Several bottles had embossed marks that could not be identified. Among these are a lightly patinated clear bottom with a distinctive stylized horse head and "ER MANFS CO" arched above it; a clear bottom with "AUC/1915/SANDSPRINGSO"; a clear bottom with "6 N" or "N 9"; a clear bottom with an Owens, Illinois symbol--plant 6, 1909 (Toulouse 1971:403); and a purple bottom with a 4 in a circle at the center and a 9 near the edge.

Can fragments have a similar range of possible functions. Machine parts, metal plates, cogs, and discs could be stable/barn or maintenance/construction related. One of the more interesting objects in this group is a small (34.5 mm high) metal rooster (Fig. 18), probably a toy, from the floor of Structure 1.

Table 21. Structure 1 Objects of Indeterminate Function (percent of artifact assemblage)

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Indeterminate	22	2.2	3	.6			25	.8
Glass	285	28.0	263	56.6	784	51.8	1332	44.5
Corrugated glass	1	.1					1	.0
Leather fragments	12	1.2					12	.4
Metal rod	4	.4			2	.1	6	.2
Metal bar	11	1.1	1	.2	3	.2	15	.5
Rebar	1	.1					1	.0
Rod with nuts	3	.3					3	.1
Rod with handle	1	.1					1	.0
Glass container	2	.2			5	.3	7	.2
Milk glass container					1	.1	1	.0
Glass bottle	2	.2	1	.2	3	.2	6	.2
Pressed glass container					2	.1	2	.1
Glass screw finish	1	.1					1	.0
Sheet metal fragment					2	.1	2	.1
Metal	23	2.3	4	.9	10	.7	37	1.2
Can body fragments	84	8.3	17	3.7	77	5.1	178	5.9
Locked/lapped seam fragments					6	.4	6	.2
Lock/lap can					12	.8	12	.4
Metal plate	2	.2	1	.2	2	.1	5	.2
Metal tube	2	.2			1	.1	3	.1
Metal pipe					1	.4	1	.0
Metal spike	3	.3					3	.1
Metal spout					1	.1	1	.0
Metal band	3	.3			6	.4	9	.3
Metal strip	1	.1					1	.0
Lead stripping			2	.4			2	.1
Iron stripping	25	2.5					25	.8
Wire hook	1	.1					1	.0

	Interior		Exterior		Collection Area		Area Total	
	n=	%	n=	%	n=	%	n=	%
Metal ring	1	.1					1	.0
Metal cap	1	.1					1	.0
Leather strap	2	.2					2	.1
Metal disc	1	.1					1	.0
Machinery part	1	.1			1	.1	2	.1
Metal cog ring	1	.1					1	.0
Shell disc (8 mm diameter)			1	.2			1	.0
Small metal rooster (toy?)	1	.1					1	.0
O-ring	5	.5			1	.1	6	.4
Metal clamp					1	.1	1	.0
Animal trap piece	1	.1					1	.0
Copper ore (14, 37 mm dia.)	2	.2	2	.4			4	.1
Metal crank	1	.1					1	.0
Rivet	1	.1					1	.0
Metal spring	2	.2					2	.1
Charcoal slag	2	.2					2	.1
Gypsum	2	.2					2	.1
Total indeterminate	513	50.4	295	63.4	921	60.9	1729	57.7

Figure 18. Rooster.

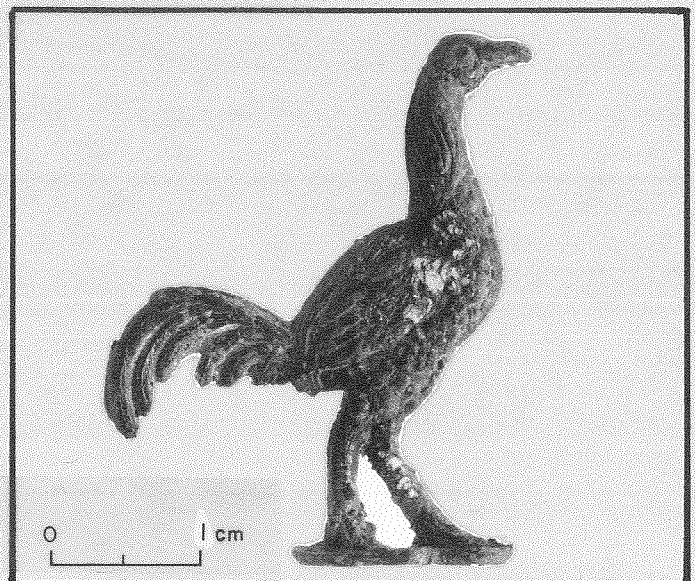


Table 22. Structure 2 and Trash Pit Indeterminate Items (percent of artifact assemblage)

	Structure 2		Trash Pit Area					
			Surface		Subsurface		Total	
	n=	%	n=	%	n=	%	n=	%
Indeterminate glass			50	42.4	46	23.8	96	30.9
Metal bar			1	.8			1	.3
Glass bottle	7*	50.0	2	1.7	1	.5	3	1.0
Indeterminate metal			2	1.7	6	3.1	8	2.6
Can body fragments			14	11.9	20	10.4	34	10.9
Metal plate					1	.5	1	.3
Metal tube			1	.8			1	.3
Metal cap					1	.5	1	.3
Machine part			1	.8			1	.3
Embossed tin			1	.8			1	.3
Total indeterminate	7	50.0	72	61.0	75	38.9	147	47.3

* four pieces a part of a "honey and almond cream" jar, possibly cold cream

Table 23. LA 65895 Glass Colors

	Structure 1						Trash Pit Area	
	Interior		Exterior		Collect. Area			
	n=	%	n=	%	n=	%	n=	%
White			1	.4	1	.1		
Clear	62	18.6	45	16.1	135	16.2	7	6.1
Purple	99	29.6	77	27.5	264	31.7	51	44.7
Brown	85	25.4	21	7.5	218	26.2	22	19.3
Aqua	73	21.9	7	2.5	138	16.6	28	24.6
Green			92	32.9			1	.9
Amber	6	1.8	2	.7			3	2.6
Pink					1	.1	1	.9
Milk glass	2	.6			9	1.1	1	.9
Cobalt blue	1	.3						
Light green	5	1.5	35	12.5	62	7.4		

	Structure 1						Trash Pit Area	
	Interior		Exterior		Collect. Area		n=	%
	n=	%	n=	%	n=	%		
Olive green	1	.3			3	.4		
Yellow green					2	.2		
Total glass	334	100.0	280	100.1	833	100.0	114	100.0

Prehistoric Objects

Two projectile point bases (Fig. 19), a chunk of obsidian, and an Alma Plain sherd were found. The points are San Pedro points, one obsidian and one rhyolite. Both have snap fractures. One point and the obsidian were found in the structure and the other point in the collection grid. The sherd was found during surface stripping just outside the structure.

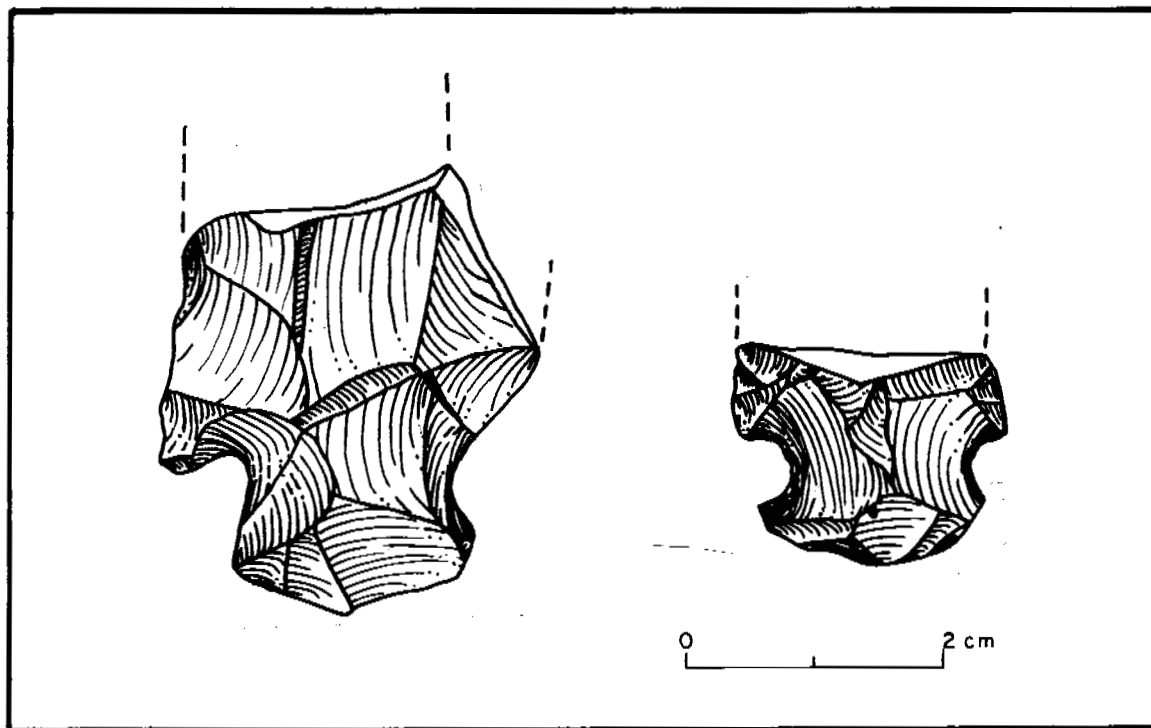


Figure 19. Projectile points: (a) FS 108, (b) FS 12.

Discussion

Items recovered from the floor of the structure suggest trash dumping occurred after or during its final use. Fragments of glass (clear, purple, brown, and aqua; $n = 33$), Euroamerican ceramics ($n = 2$), can fragments ($n = 10$), and equal numbers of round and square nails ($n = 10$) occurred on the floor. Also on the floor were a pen nib, a harmonica part, the coin or token, the hand auger, and chisel. A cluster of wagon and horse-related parts were found in the fill of the northwest corner of the structure and the remains of an eight-spoke wagon wheel, 1.09 m in diameter, along the northwest wall. Much of a leather harness was found in the fireplace. These, as well as the large number of stable/barn items, indicate that Structure 1 was used as a barn or shop where livestock-related activities took place.

The artifact assemblage tends to confirm the historical record and indicates that none of the owners following the Oroscos lived in or used the structures. With the exception of a possible soda bottle fragment, which dates after 1936, the datable artifacts can be attributed to the period before 1931, when the Oroscos sold the property.

The Office of Archeological Studies has developed and refined a New Mexico pattern that is a variant of South's (1977) frontier pattern. Reasoning that South's sites contained less domestic refuse (Maxwell 1983:89) and that regional availability of various commodities (Oakes 1990:42) would influence the assemblage content, predicted ranges for each functional group of artifacts were calculated using only New Mexico sites. Table 24 provides a summary of all but one of the sites used to formulate predictive ranges for each functional category. All but the Ontiberos site are in the northeast quarter of the state and were inhabited by Anglos. The Ontiberos site is just outside of Roswell where the Hispanic inhabitants may have had greater access to market goods. The Cavanaugh site did have an Hispanic tenant for part of its occupancy. Also evident is that the sites tend to have shorter occupations than the Orosco homestead and the inhabitants were usually employed, further suggesting greater access to market goods. Given these differences, the Orosco homestead should not be expected to follow the pattern as precisely as an Anglo site from the northeastern portion of the site, and it does not.

Table 25 compares the Orosco homestead assemblage with the observed range in the six OAS New Mexico site assemblages and the New Mexico pattern predicted range (Oakes 1990:42). It deviates most in the construction/maintenance, stable/barn, and indeterminate functional groups. The abundance of stable/barn items is the most easily explained. If Structure 1 was last used as a barn, it should have more of these items. Structure 1, the trash pit, and trash pit collection area all have more stable/barn items than the OAS range. This further suggests that the site was used for livestock activities after some or all of the Orosco family moved to San Lorenzo between 1910 and 1912. No other site in the sample seems to have a stable or barn.

The other differences are more difficult to evaluate. Factors that can influence assemblage content include the ethnicity of inhabitants--the kinds of materials found, use of space (Kent 1984), and discard practices; access to market goods; preservation of some materials; archaeological sampling--structural versus trash and surface contribution to the assemblage; and analytical methods such as in-field versus laboratory analysis, to name a few.

Table 24. New Mexico Territorial Sites excavated by OAS

Site	Orosco	Ontiberos	Cavanaugh	Butcher	Wyatt	Colfax	Wilson
Location	southwest San Lorenzo	southeast/Rosewell	northeast Las Vegas	northeast Tuccumcari	northeast Tuccumcari	northeast Colfax	northeast Logan
Occupation type	homestead	homestead	house/ranch	dugout	dugout	railroad shanty camp	homestead
Ethnicity/Economic	Hispanic occasional laborer	Hispanic laborer	Anglo construction engineer and Hispanic tenant	Anglo Blacksmith	Anglo occasional work in town	railroad builders	Anglo store clerk
Occupation dates	1898 to 1911-1931	1903 - 1908	1888 - 1891, 1891 - 1895	1906 - 1909	1903 - 1909	between 1905 and 1920	1915 - 1927
Years of occupation	12 to 33	5	7	3	6	15	12 - intermitent
Sample size	3320	6311	40580	6752	2851	8894	2591
Sources	this report	Oakes 1983a	Maxwell 1983	Maxwell 1983; Oakes 1983b, Seaman 1983		Oakes 1983b	Oakes 1990

Table 25. The Orosco Homestead Artifact Assemblage Compared to Other OAS New Mexico Sites by Functional Category and the New Mexico Pattern (percent of artifact assemblage)

Category	Orosco Homestead	OAS Range	OAS Mean	St. Deviation	NM Pattern
Foodstuffs	3.33	1.09-5.17	4.13	2.49	3.21-9.11
Indulgences	1.36	.13-6.74	2.80	3.52	4.47-17.49
Domestic routine	21.46	4.12-17.43	10.87	5.95	8.43-42.79
Construction/maintenance	13.32	30.29-59.30	42.98	12.67	38.77-59.71
Personal effects	1.15	.99-1.91	1.44	.40	1.18-1.82
Entertainment/leisure	.12	0-1.20	.30	.45	.21-1.17
Stable/barn	2.27	.11-.79	.27	.27	.13-.51
Arms	.18	.14-1.00	.47	.32	.34-.80
Indeterminate	56.80	31.77-43.57	36.59	4.31	31.61-42.01

(data sources: Maxwell 1983:59, 88; Oakes 1983b:102, 1990:35; New Mexico pattern source: Oakes 1990:42 [based on the same six sites plus one site not excavated and analyzed by OAS])

Table 26. Cavanaugh and the Orosco Homestead Provenience Distributions Compared to Observed Range (Table 25)

	Cavanaugh						Orosco Homestead			
	Rm. 1	Rm. 2	out bldg	trash pit	trash mound	site surface	St. 1 inter.	trash pit	St. 1 area	t.p. area
Foodstuffs	0	-	-	0	-	0	0	++	0	-
Indulgences	0	0	-	0	0	0	0	0	0	0
Domestic	0	-	-	0	0	0	0	++	++	++
Const./ Main.	0	++	++	-	0	0	0	--	--	--
Personal Effects	0	-	-	++	++	--	0	++	--	0
Entertain/ Leisure	0	0	0	0	0	0	0	0	0	0
Arms	0	0	-	0	-	0	0	-	0	-
Stable/Barn	-	0	0	0	-	0	++	+	0	++
Indeterminate	0	--	--	++	--	++	++	0	++	++
Sample Size	5797	11847	1724	8436	1448	10854	1017	176	1513	118

(0 = within range; - or + = within one standard deviation; ++ or -- = more or less than one standard deviation).

Table 26 compares the Cavanaugh and Orosco homestead provenience assemblages. Cavanaugh was a wealthy construction engineer who lived at the house from 1888 to 1891. An Hispanic tenant occupied the house between 1891 and 1895. The table suggests there are regularities that may cross-cut economic and possibly ethnic boundaries. By indicating whether an individual assemblage falls within the observed site range, within one standard deviation of the range, or more than one standard deviation above or below the range, similarities and differences are illustrated. Some functional groups have more even distributions: food stuffs, indulgences, entertainment, and arms proportions tend to conform to the observed site range. On the other hand, construction/maintenance and indeterminate objects rarely do. A prime factor seems to be the provenience type: structure, trash deposit, or surface assemblage. The New Mexico pattern may reflect structure fill more than trash or surface assemblages. Trash deposits tend to have more personal effects and indeterminate objects while structures contain more construction/maintenance objects. Surface assemblages have more indeterminate objects. Some functional groups, such as domestic routine objects, may reflect the length of occupation. At the Orosco homestead, domestic routine objects occurred in greater than expected proportions in all but the Structure 1 excavated assemblage.

The kinds of objects in the construction/maintenance and indeterminate groups further illustrates how the Orosco homestead differs from the other sites (Table 27). It has fewer nails,

Table 27. Comparison of Construction/Maintenance and Indeterminate Items with Four Other Sites

	Orosco Homestead						Wilson	Colfax	Onti-beros	Cava-naugh
	St. 1 inter.	St. 1 ext.	St. 1 surface	trash pit	t. pit surf.	site total				
Const/Main: nails	12.3	3.4	1.4	.8	6.8	5.3	7.7	13.4	14.5	22.9
glass	2.8	1.5	.4		1.1	1.3	21.9	9.8	12.0	11.5
wire	1.6	3.4	1.0		.6	1.4	4.0	1.6	1.7	3.4
wood	6.5	1.9				2.2	.7	.2	.6	1.4
Indeter.: glass	28.0	56.5	51.8	42.4	26.1	43.0	27.4	32.0	25.3	13.1
cans	8.3	3.6	6.3	1.7	3.4	6.9	.3	2.1	6.3	20.3
Sample Size	1017	465	1513	176	118	3320	2591	8894	6311	40580

(Sources: Cavanaugh, Maxwell 1983, appendix; Ontiberos, Oakes 1983a:76, 82; Colfax, Oakes 1983b:49, 53; Wilson, Oakes 1990, Appendix 1)
 (bottles are not included in the indeterminate glass percentage; percent of assemblage)

and less glass and wire than four OAS sites. This may result, at least in part, from the type of structure involved. The Orosco homestead has the only adobe structure. This type of construction may require fewer nails and could be less suitable for windows. When viewed alone, Structure 1 is much closer to the observed range, and has more nails than the Wilson homestead as a whole. It is also possible that nails and glass were reused or rarely discarded, since they seldom occur in the other proveniences.

Greater numbers of indeterminate objects could result from various factors. Glass accounts for much of the indeterminate group at all sites and comprises more of the exterior and surface assemblages at the Orosco homestead. Few of the Orosco homestead glass objects are assigned a function. This could reflect either severe breakage or a conservative approach in assigning a function. Furthermore, surface artifacts comprise half the assemblage compared to about a quarter of that from Cavanaugh.

SUMMARY AND CONCLUSIONS

The first Europeans came to the San Lorenzo area to exploit minerals, principally copper at Santa Rita, in the early 1800s, and gold at Pinos Altos in the 1850s. Hispanic farming villages appeared along the Mimbres River in the 1860s. Chiricahua Apache raids inhibited settlement into the 1880s.

Virtually the whole valley around San Lorenzo was settled by homesteading and preemptive cash sales. A few of the early settlers were merchants or entrepreneurs, such as W. L. Thompson and N. Y. Ancheta. Yet, the vast majority were poor Hispanic miners, laborers, or farm workers.

While Grant County as a whole grew rapidly in the period between 1890 and 1910, the population of the San Lorenzo area increased only slightly, from 334 to 357. Mining towns experienced much growth, often becoming commercial centers. The value of farms and farm improvements increased greatly, as did the value of livestock. Farm crops were principally those related to livestock, corn, and forage crops. The amount of wool produced decreased while the number of cattle increased greatly, leveling off by 1910. San Lorenzo, which was inhabited entirely by farmers and laborers in 1880, had carpenters, seamstresses, teamsters, musicians, a nurse, general merchandisers, clerks, and blacksmiths in 1890.

Cayetano Orosco and his family settled at LA 65895 and filed a homestead affidavit in May of 1898, receiving a patent for 40 acres in 1904. An adobe structure (Structure 1), outhouses, and a well were purchased from a previous occupant of the land. Cayetano Orosco built a stone house, fenced and maintained an orchard, and grew six acres of crops while awaiting his patent. He was 64 years old when he received the patent. Unfortunately, there are no 1900 census records to reveal how many family members lived at LA 65895 during this time. By 1910, Cayetano had died and the household consisted of his widow, a son who was single and unemployed, and three of Cayetano's grandchildren. The family had a house in the town of San Lorenzo by 1912 and continued to own the homestead until 1931.

If the historic documentation were available, we might conclude that the family lived off the land at close to a subsistence level. Cayetano was too old for regular employment and six acres of crops on land principally suited for pasture would not provide much, if any, surplus. The older children may have worked and provided some resources for the family.

The archaeological record indicates a good deal of participation in a market economy. Remains of cans, jars, a wide range of Euroamerican ceramics, and other market goods were recovered. Few objects were obviously recycled or reused. Wild animal species were utilized as food, but most of the faunal remains are from medium-sized artiodactyls, probably sheep or goat. Only one specimen in the small assemblage had what may have been a commercial saw cut.

Comparing the Orosco homestead artifact assemblage with those from other sites of the same era provides insight into the relative economic status of the household. The assemblage falls within the observed range for other OAS sites in foodstuffs, indulgences, personal effects, entertainment/leisure items, and arms. There are more domestic routine objects than at any other

OAS site. This suggests a healthy participation in the local market economy. Fewer construction/maintenance objects possibly reflects the adobe construction or careful dismantling of the architectural features. Proportionately, stable/barn items are over twice as common here as the other OAS sites. This is true for not only Structure 1 but the trash pit. This information, combined with historic documents indicating that the family moved to San Lorenzo, strongly suggests that the property was used for livestock related activities after 1912.

The San Lorenzo Project illustrates how historical and archival research and archaeological analysis can be used in a complementary manner. Historical records provide background and context while the archaeology provides detail, helps to correct our misconceptions, and exposes variability and patterning not evident in a strictly historical perspective.

REFERENCES

- Anyon, R., and Steven A. LeBlanc
1984 *The Galaz Ruin: A Prehistoric Mimbres Village in Southwestern New Mexico*. Maxwell Museum of Anthropology Publication Series, University of New Mexico Press, Albuquerque.
- Barnes, Frank C.
1985 *Cartridges of the World*. DBI Books, Inc., Northbrook, Ill.
- Bartlett, John Russell
1965 *Personal Narrative of Explorations and Incidents in Texas, New Mexico, California, Sonora, and Chihuahua Connected with the United States and the Mexican Boundary Commission Duty, the Years 1850, '51, '52, and '53*, vol. 1. Rio Grande Press, Inc. Chicago.
- Beck, Warren A.
1962 *New Mexico: A History of Four Centuries*. University of Oklahoma Press, Norman.
- Berge, Dale
1980 *Simpson Springs Station: Historical Archaeology in Western Utah*. Cultural Resources Series No. 6, Bureau of Land Management, Salt Lake City.
- Berry, Susan, and Sharman Apt Russell
1986 *Built to Last: An Architectural History of Silver City, New Mexico*. New Mexico Historic Preservation Division, Santa Fe.
- Christiansen, Paige W.
1974 *The Story of Mining in New Mexico*. New Mexico Bureau of Mines and Mineral Resources. Scenic Trips to the Geologic Past No. 12, Socorro.
- Clark, Ira G.
1987 *Water in New Mexico: A History of Its Management and Use*. University of New Mexico Press, Albuquerque.
- Coggins, George Cameron, and Charles F. Wilkinson
1987 *Federal Public Land and Resources Law*. Foundation Press, Inc., Mineola, New York.
- Corps of Engineers
1978 *Flood Plain Information: Mimbres River and Florida Gap Draw, Deming, Luna County, New Mexico*. Prepared for the Luna County Board of County Commissioners.
- Couchman, Donald Howard
1990 *Cooke's Peak--Pasaron Por Aqui: A Focus on United States History in Southwestern New Mexico*. Cultural Resources No. 7, Bureau of Land Management, Las Cruces.

- Day, David T.
1892 *Report on Mineral Industries in the United States at the Eleventh Census: 1890*. Government Printing Office, Washington D.C.
- Emmons, S. F., and G. F. Becker
1885 *Statistics and Technology of the Precious Metals*, Vol. XXII. U.S. Census Office, Washington, D.C.
- Fike, Richard E.
1987 *The Bottle Book: A Comprehensive Guide to Historic, Embossed Medicine Bottles*. Gibbs M. Smith, Inc. Peregrine Smith Books, Salt Lake City.
- Findley, James, Arthur H. Harris, Don E. Wilson, and Clyde Jones
1975 *Mammals of New Mexico*. University of New Mexico Press, Albuquerque.
- Fontanna, Bernard L., Cameron Greenleaf, Charles W. Ferguson, Robert A. Wright, and Doris Frederick
1962 Johnny Ward's Ranch: A Study in Historic Archaeology. *The Kiva* 28(1-2):1-115.
- Gates, Paul W.
1968 *History of Public Land Law Development*. Public Land Law Review Commission, Washington, D.C.
- Gates, William C. Jr., and Dana E. Ormerod
1982 The East Liverpool Pottery District: Identification of Manufacturers and Marks. *Historical Archaeology* 16 (1-2): 1-358.
- Gillio, David, Frances Levine, and Douglas Scott
1980 *Some Common Artifacts Found at Historical Sites*. Cultural Resources Report No. 31, USDA Forest Service, Southwestern Region, Albuquerque.
- Gilpin, Dennis
1983 Historic Artifacts. In *Cultural Resource Investigations on Gallegos Mesa: Excavations in Blocks VIII and IX, and Testing Operations in Blocks X and XI, Navajo Indian Irrigation Project, San Juan County, New Mexico, vol. 3*, by Lawrence E. Vogler, Dennis Gilpin, and Joseph K. Anderson, pp. 1005-1070. Navajo Nation Papers in Anthropology No. 24, Navajo Nation Cultural Resource Management Program.
- Gordon, Clarence
1883 Cattle, Sheep, and Swine. Supplement to Enumeration of Livestock on Farms in 1880. In *Report on the Productions of Agriculture as Returned at the Tenth Census*, pp. 951-1116. Department of the Interior, Census Office, Washington, D.C.
- Gunnerson, James H.
1979 Southern Athapascan Archaeology. In *Handbook of North American Indians, vol. 9, Southwest*, edited by Alfonso Ortiz, pp. 162-169. Smithsonian Institution Press, Washington, D.C.

- Habicht-Mauche, Judith A.
 1988 *Historic Artifact Analysis, Hubbell Trading Post National Historic Site*. Southwest Archaeological Consultants, Inc. Southwest Report No. 200, Santa Fe.
- Hannaford, Charles A., and Yvonne R. Oakes
 1983 Historic Artifacts. In *The Ontiberos Site: A Hispanic Homestead Near Roswell, New Mexico*, by Yvonne R. Oakes, pp. 70-82. Museum of New Mexico, Laboratory of Anthropology Note No. 311, Santa Fe.
- Hedlund, D. C.
 1979 *Background Information to Accompany Folio of Geologic, Mineral Resource, Geochemical, Aeromagnetic, and Gravity Maps of the Hillsboro and San Lorenzo Quadrangles, Sierra and Grant Counties, New Mexico*. Geological Survey Circular 808.
- Herskovitz, Robert M.
 1978 *Fort Bowie Material Culture*. University of Arizona, Anthropological Papers No. 31, Tucson.
- Houghton, Frank E.
 1979 Climate. In *Soil Survey of Grant County, New Mexico: Central and Southern Parts*, by Tommie Lee Parham, R. F. Paetzold and Charles E. Souders, pp. 1-2. USDA and Soil Conservation Service.
- Hubbard, John P.
 1978 *Revised Check-List of the Birds of New Mexico*. New Mexico Ornithological Society Publication No. 6.
- Hull-Walski, Deborah H., and James E. Ayres
 1989 *The Historical Archaeology of Dam Construction Camps in Central Arizona, vol. 3: Laboratory Methods and Data Computerization*. Dames and Moore, Phoenix.
- Irwin-Williams, Cynthia
 1979 Post-Pleistocene Archeology, 7000-2000 B.C. In *Handbook of North American Indians*, vol. 9, *Southwest*, edited by Alfonso Ortiz, pp. 31-42. Smithsonian Institution Press, Washington, D.C.
- Jensen, Joan M.
 1982 Canning Comes to New Mexico: Women and the Agricultural Extension Service, 1914-1919. *New Mexico Historical Review* 57(4):361-386.
- Jones, Oakah L., Jr.
 1970 Introduction. In *Federal Control of the Western Apaches, 1848-1886*, by Ralph Hendrick Ogle. University of New Mexico Press, Albuquerque.
- Kent, Susan
 1984 *Analyzing Activity Areas: An Ethnoarchaeological Study of the Use of Space*. University of New Mexico Press, Albuquerque.

- Kovel, Ralph, and Terry Kovel
1986 *Kovels' New Dictionary of Marks*. Crown Publishers, Inc. New York.
- Lang, Herbert H.
1976 The New Mexico Bureau of Immigration, 1880-1912. *New Mexico Historical Review* 51(3):193-214.
- Lange, Charles H., and Carroll L. Riley (editors)
1970 *The Southwestern Journals of Adolph F. Bandelier: 1883-1884*. University of New Mexico Press, Albuquerque.
- Lehner, Louis
1988 *Lehner's Encyclopedia of U.S. Marks on Pottery, Porcelain and Clay*. Collectors Books, Schroeder Publishing Co, Inc., Paduca, Kentucky.
- Lindley, Walter G.
1979 Rangeland. In *Soil Survey of Grant County, New Mexico, Central and Southern Parts*, by Tommie Lee Parham, R. F. Paetzold and Charles E. Souders, p. 57. USDA and Soil Conservation Service.
- Lundwall, Helen J. (editor)
1983 *Pioneering in Territorial Silver City: H. B. Ailman's Recollections of Silver City and the Southwest, 1971-1892*. University of New Mexico Press, Albuquerque.
- Magnum, Neil C.
1990 *In the Land of Frozen Fires: A History of Occupation in El Malpais Country*. Southwest Cultural Resources Center, Professional Papers No. 32. National Park Service, Santa Fe.
- Maxwell, Timothy D.
1983 *Excavations at the Cavanaugh Site, Las Vegas, New Mexico*. Museum of New Mexico, Laboratory of Anthropology Note No. 321. Santa Fe.
- May, Earl Chapin
1937 *The Canning Clan: A Pageant of Pioneering Americans*. MacMillan Company, New York.
- Miller, Darlis A.
1979 Hispanos and the Civil War in New Mexico: A Reconsideration. *New Mexico Historical Review* 54(2):105-123.
- Mullane, William H.
1968 *Indian Raids as Reported in The Silver City Enterprise, Silver City, New Mexico, 1882-1886*. William H. Mullane.
- Myers, Lee
1968 Military Establishments In Southwestern New Mexico: Stepping Stones to Settlement. *New Mexico Historical Review* 43(1) 5-48.

- Nelson, Lee H.
1968 *Nail Chronology as an Aid to Dating Old Buildings*. National Park Service Technical Leaflet 48.
- Nelson, Norm, and Sandra Marshall
1988 Site form for LA 65895, on file at ARMS, Historic Preservation Division, Santa Fe.
- Newell, F. H.
1894 *Report on Agriculture by Irrigation in the Western Part of the United States at the Eleventh Census: 1890*. Government Printing Office, Washington, D.C.
- Newman, T. Stell
1970 A Dating Key for Post-Eighteenth Century Bottles. *Historical Archaeology* 4:70-74.
- Northrop, Stuart A.
1975 *Turquoise and Spanish Mines in New Mexico*. University of New Mexico Press, Albuquerque.
- Nostrand, Richard L.
1987 The Century of Hispano Expansion. *New Mexico Historical Review* 62(4):361-386.
- Oakes, Yvonne R.
n.d. Data Recovery Plan: San Lorenzo Project. NMSHTD Project No. SP-EB-1109 (206). Manuscript on file, Office of Archaeological Studies, Santa Fe.
- 1983a *The Ontiberos Site: A Hispanic Homestead near Roswell, New Mexico*. Museum of New Mexico, Laboratory of Anthropology Note No. 311, Santa Fe.
- 1983b *Colfax, New Mexico: A Study of Land Use Patterns on the Maxwell Land Grant*. Museum of New Mexico, Laboratory of Anthropology Note No. 313, Santa Fe.
- 1990 *The Wilson Homestead: An Early Twentieth-Century Site on the Canadian River, Quay County, New Mexico*. Museum of New Mexico, Archaeology Notes No. 6, Santa Fe.
- Ogle, Ralph Hedrick
1970 *Federal Control of the Western Apaches, 1848-1886*. University of New Mexico Press, Albuquerque.
- Opler, Morris E.
1983 Chiricahua Apaches. In *Handbook of North American Indians*, vol. 10, *Southwest*, edited by Alfonso Ortiz, pp. 401-418. Smithsonian Institution Press, Washington, D.C.
- Parham, Tommie Lee, R. F. Paetzold, and Charles E. Souders
1979 *Soil Survey of Grant County, New Mexico, Central and Southern Parts*. USDA and Soil Conservation Service.

- Paul, John R., and Paul W. Parmalee
 1973 *Soft Drink Bottling: A History With Special Reference to Illinois*. Illinois State Museum Society, Springfield.
- Porter, Robert P.
 1884 *Valuation, Taxation, and Public Indebtedness in the U.S. as Returned at the Tenth Census (June 1, 1880)*, vol. 7. Government Services Administration, Washington, D.C.
- Randall, Mark E.
 1977 Identifying and Dating 19th and 20th Century Marbles. *Southwest Folklore* 1(2):1-34.
- Resettlement Administration of Natural Resources Board
 1936 *Report on Irrigated Farming in the Mimbres Watershed of New Mexico*.
- Rock, Jim
 1980 American Bottles: A Few Basics. Ms. on file, Klamath National Forest, USDA.
- Rosa, Joseph G.
 1985 *Guns of the American West*. Crown Publishers, Inc., New York.
- Schroeder, Albert H.
 1959 A Study of the Apache Indians. Ms. on file, Museum of New Mexico, Division of Anthropology Library, Santa Fe.
- Seaman, Timothy J.
 1983 *Excavations at the S. M. Butcher and A. E. Wyatt Homesteads*. Museum of New Mexico, Laboratory of Anthropology Note No. 323, in press.
- Sears, Roebuck and Co.
 1969 *The 1902 Edition of the Sears Roebuck Catalogue*. Crown Publishers, Inc. New York.
 1970 *Consumers Guide, Fall 1900*. DBI Books, Northfield, Ill.
 1979 *Consumers Guide, Fall 1909*. Ventura Books, Inc.
- Sebastian, Lynne, and Signa Larralde
 1989 *Living on the Land: 11,000 Years of Human Adaptation in Southeastern New Mexico*. Cultural Resources Series No. 6, New Mexico Bureau of Land Management, Roswell.
- South, Stanley
 1977 *Method and Theory in Historical Archeology*. Academic Press, New York.
- Stuart, David E., and Rory P. Gauthier
 1981 *Prehistoric New Mexico: Background for Survey*. New Mexico State Historic Preservation Office, Santa Fe.

Tainter, Joseph A., and Frances Levine
1987 *Cultural Resources Overview: Central New Mexico*. USDA Forest Service and Bureau of Land Management, Albuquerque and Santa Fe.

Thrapp, Don L.
1974 *Victorio and the Mimbres Apaches*. University of Oklahoma Press, Norman.

Toulouse, Julian Harrison
1971 *Bottle Makers and Their Marks*. Thomas Nelson, Inc. New York.

Ungnade, Herbert E.
1965 *Guide to the New Mexico Mountains*. University of New Mexico Press, Albuquerque.

United States Census Bureau
1883 *Report on the Production of Agriculture as Returned at the Tenth Census*. Government Printing Office, Washington, D.C.

1885 *Compendium of the Tenth Census, 1880*. Government Services Administration, Washington, D.C.

1895 *Report on the Statistics of Agriculture in the United States at the Eleventh Census: 1890*. Government Printing Office, Washington, D.C.

1902a *Agricultural Products, Part I; Farms, Livestock, and Animal Products*. Washington, D.C.

1902b *Agriculture, Part II; Crops and Irrigation*. Washington, D.C.

1905 *Mines and Quarries, 1902*. Government Printing Office, Washington, D.C.

United States Department of Commerce and Bureau of Census
1913a *Mines and Quarries, vol. 11, 1909*. Government Printing Office, Washington, D.C.

1913b *Thirteenth Census of the U.S. Taken in the Year, 1910, Abstract of the Census with Supplement for New Mexico*. Government Printing Office, Washington, D.C.

Walker, Frances A.
1872 *A Compendium of the Ninth Census (June 1, 1870)*. Government Services Administration, Washington, D.C.

Wasserman, Mark
1984 *Capitalists, Caciques, and Revolution: The Native Elite and Foreign Enterprise in Chihuahua, Mexico, 1854-1911*. University of North Carolina Press, Chapel Hill.

Westphall, Victor
1965 *The Public Domain in New Mexico, 1854-1891*. University of New Mexico Press, Albuquerque.

Wilson, Rex

1981 *Bottles on the Western Frontier*. University of Arizona Press, Tucson.

Woodbury, Richard B., and Ezra B. W. Zubrow

1979 Agricultural Beginnings, 2000 B.C.-A.D. 500. In *Handbook of North American Indians*, vol. 9, *Southwest*, edited by Alfonso Ortiz, pp. 43-60. Smithsonian Institution Press, Washington, D.C.

Wyckoff, Martin A.

1984 *United States Military Buttons of the Land Services: 1787-1902, A Guide and Classificatory System*. McLean County Historical Society, Bloomington.