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## AN ISOLATED FRONTIER OUTPOST Historical and Archaeological Investigations of the Carrizo Creek Station







**AN ISOLATED FRONTIER OUTPOST:  
HISTORICAL AND ARCHAEOLOGICAL INVESTIGATIONS  
OF THE CARRIZO CREEK STAGE STATION**



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**AN ISOLATED FRONTIER OUTPOST:  
HISTORICAL AND ARCHAEOLOGICAL INVESTIGATIONS  
OF THE CARRIZO CREEK STAGE STATION**

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Department of Parks and Recreation

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*An Isolated Frontier Outpost:*

*Historical and Archaeological Investigations of the Carrizo Creek Stage Station*

By Stephen R. Van Wormer, Sue Wade, Susan D. Walter, and Susan Arter  
Editor, Richard Fitzgerald; Series Editor, Christopher Corey

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***“Everybody goes armed here. If a man has no shirt  
to his back he will have his knife in his belt.”***  
*(Phocion R. Way – San Antonio – San Diego  
Mail Line Passenger, 1858)*







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*"Warner's Pass from San Felipe" 1853-1855  
Pacific Railroad Expedition and Surveys  
Courtesy of Melvin and Ellen Sweet*



## *PREFACE*

Contained within this volume, number 29 in our series of *Publications in Cultural Heritage*, is the story of the Carrizo Creek Station and the once heavily traveled Southern Emigrant Trail. The Carrizo Wash is located on the far southeast boundary of Anza–Borrego Desert State Park and where a small underground current rises to the surface forming a meandering stream and spring. This desert oasis was the first reliable source of flowing water west of the Colorado River and thus became the focal point of all those who would brave the southern crossing to and from California. No doubt it was known to the indigenous prehistoric people and was a way station along the trail system used to traverse the Colorado Desert and the Cuyamaca Mountains. It was along these same ready-made paths that the late 18<sup>th</sup> century Spanish *entradas* of De Anza and Fages followed. The first known European penetration of the “Carrizo Corridor” was in 1772 by Fages traveling east from San Diego in pursuit of Army deserters. Following the Yuma uprising of 1781 the trail network was effectively closed until the 1820s when Mexican herders and later overland fur trappers began regularly using the southern route into California. By the 1830’s new branches of the trail were established one of which after passing through the Carrizo Wash threaded the mountains through the San José and San Felipe Valleys. This route became the preferred route by the late 1840s after American settler Jonathan Warner had established his “ranch” and it would be the same route used by the American military expeditions of both Kearney’s Army of the West and the Mormon Battalion during the brief Mexican/American War.

It would be the Carrizo Corridor and “Warner’s Pass” that, beginning in 1848, thousands of gold seekers would travel in route to the placer mines of the Sierra foothills. The travails of this flood tide eventually led in 1855 to the establishment of a small adobe Army outpost at the Carrizo Creek Spring which by 1857 became an important link in the first overland transcontinental mail service along the San Antonio and San Diego Mail Line. In 1858 the Overland Mail Company better known as the Butterfield Line was using the Carrizo Creek Station as part of its much larger and complex string of support stations. The Civil War and intercontinental railroad effectively put an end to this mail service and the Carrizo Creek Station, although still occupied and witness to cattle drives, went into a steady decline. In brief, this report presents the results of archaeological investigations at the Carrizo Creek Station which documents that for a brief period it was a nexus for 19<sup>th</sup> century Native American, Hispanic, and Anglo-American cultures. In recognition of the importance of this isolated frontier outpost it has been included as part of the Southern Overland Trail Cultural Preserve within Anza Borrego Desert State Park.

Richard Fitzgerald  
*Editorial Advisor*



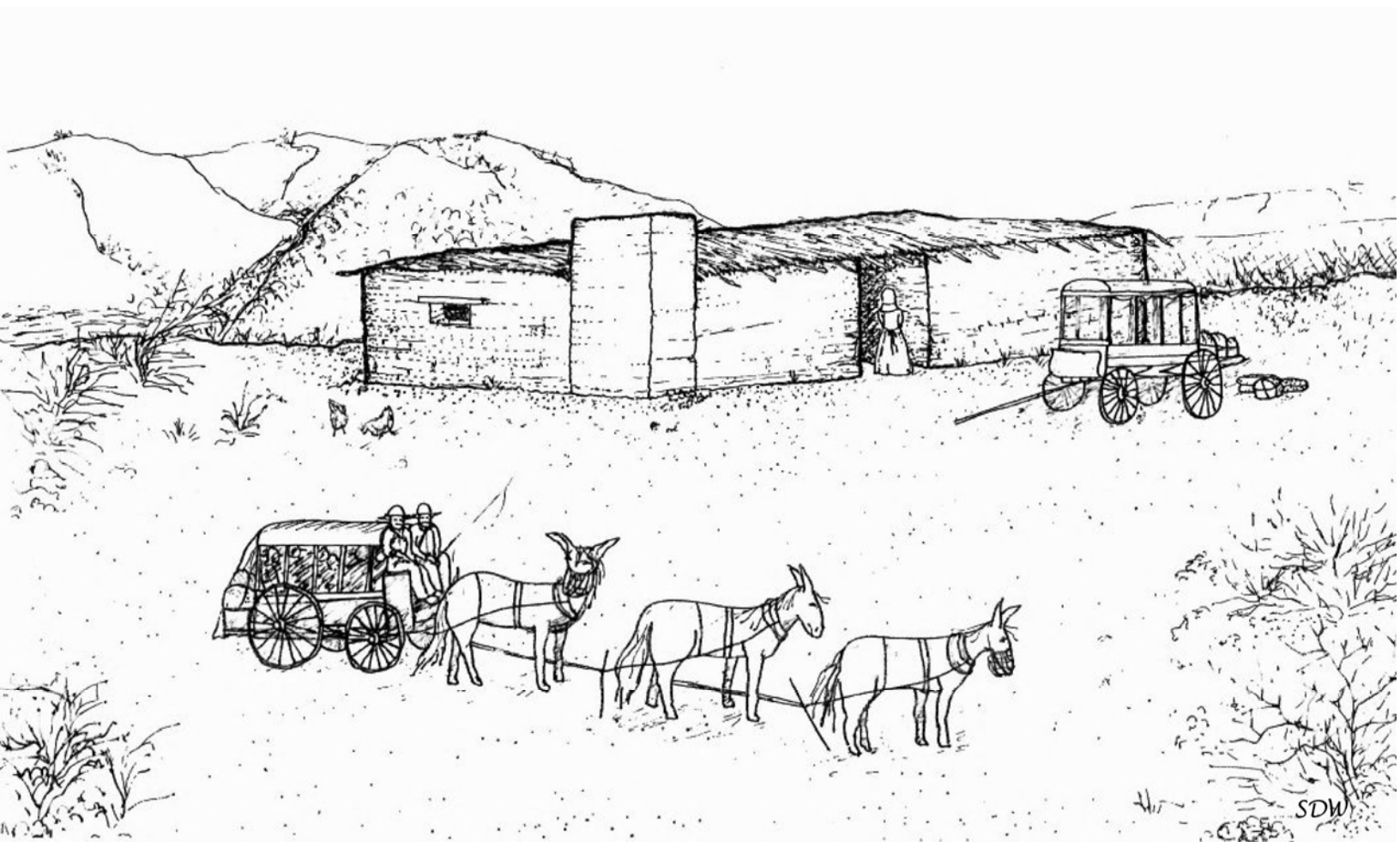
## *ACKNOWLEDGEMENTS*

Archaeological field work, historic research, artifact analysis, and preparation of this report were completed by the following people: Stephen R. Van Wormer (principal author, historic research, field and artifact analysis co-supervisor); Sue A. Wade (project manager, field and artifact analysis co-supervisor, author); Bonnie Bruce (archaeological field technician, artifact analyst, technical illustrator); Susan D. Walter (artifact analyst) Steven Briggs and Delman James (archaeological field technicians); Heather Thomson (archaeological field technician, research contributor); Christopher Wray (field assistant, research contributor); Mike Volberg (field assistant, research contributor); Jeanie Jones (field assistant), and Christopher Garthe (field assistant). Valuable archaeological excavation assistance was provided by Southern Service Center archaeological staff Marla Mealey, Michael Buxton, Patty McFarland, Karen Shabel, Michael Sampson, and Carmen Zepeda. The California Conservation Corps assistance was invaluable in reburying the site and constructing erosion protection features. The project could not have been completed without the unfailing assistance provided by Colorado Desert Archaeological Society volunteers Sam and Astrid Webb, Kerry Hunsinger, Carl Kennerson, Dave and Ruth Otis, and Richard Payne. Artifact analysis was conducted by Susan Walter of Walter Enterprises, faunal material was analyzed by Susan Arter of the San Diego Museum of Natural History, and Native American ceramic and lithic analysis was completed by Sue Wade. Field notes, photographs, artifacts, and analysis documents are currently housed at the California State Parks, Colorado Desert District, Begole Archaeological Research Center.

Sue Wade  
*Author*



**AN ISOLATED FRONTIER OUTPOST:  
HISTORICAL AND ARCHAEOLOGICAL INVESTIGATIONS  
OF THE CARRIZO CREEK STAGE STATION**







# Chapter 1: Introduction

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On the western Colorado Desert, at the extreme southeast corner of Anza-Borrego Desert State Park, a small stream, Carrizo Creek, trickles along a sandy wash for about two miles and then disappears back into the coarse, dry soil. From 1857 to the middle 1870s, a small adobe stage station stood on the banks of the wash. Dependent on precarious overland supply lines and situated in an unsettled and sometimes lawless country, Carrizo Creek Station was a small isolated frontier outpost, providing fresh horses for the coaches of the Overland Mail, and food, drink, and occasionally a brief rest for weary travelers.

By the 1990s, nearly 130 years since the stage station fell into disuse, the site had suffered greatly from grading and severe erosion and had nearly disappeared from the landscape (Figure 1). With the recognition that if no preservation efforts were undertaken, the site would soon be destroyed, California State Parks archaeologists began investigations to determine what structures and features remained at the site and what protection measures were necessary for its preservation. In 1999, California State Parks Cultural Resource staff and District Archaeologist Rae Schwaderer recognized the need to archaeologically explore the site and to stabilize whatever features might remain. Funding was dedicated to this task and the research and fieldwork, under the direction of project leaders Sue A. Wade (Associate State Archaeologist) and Stephen R. Van Wormer (State Historian II), began in 2000.

The first task was to define the research and environmental context within which the Carrizo Stage Station exists—what historians of the route have called the Carrizo Corridor. The Carrizo Corridor, from Carrizo Stage Station on the south to Warner Ranch on the north, spans approximately 50 miles, nearly 35 miles of which lie within the southern portion of the Anza-Borrego Desert State Park (Figure 2). Three of the stage station sites lie within the park—San Felipe, Palm Springs, and the southernmost, Carrizo. In addition to extensive historic research of the route and stage station sites, during March and April 2001 each of the three sites was surface surveyed and remote sensing and archaeological investigations were completed. This testing was guided by the *Research Design for Archaeological Test Excavations at Three Historic Stage Station Sites Along the Carrizo Corridor of the Butterfield Stage Route* (Wade and Wray 2001), and the test results are documented in *Archaeological Excavations at Carrizo Stage Station, Anza-Borrego Desert State Park, California* (Wade et al. 2001).

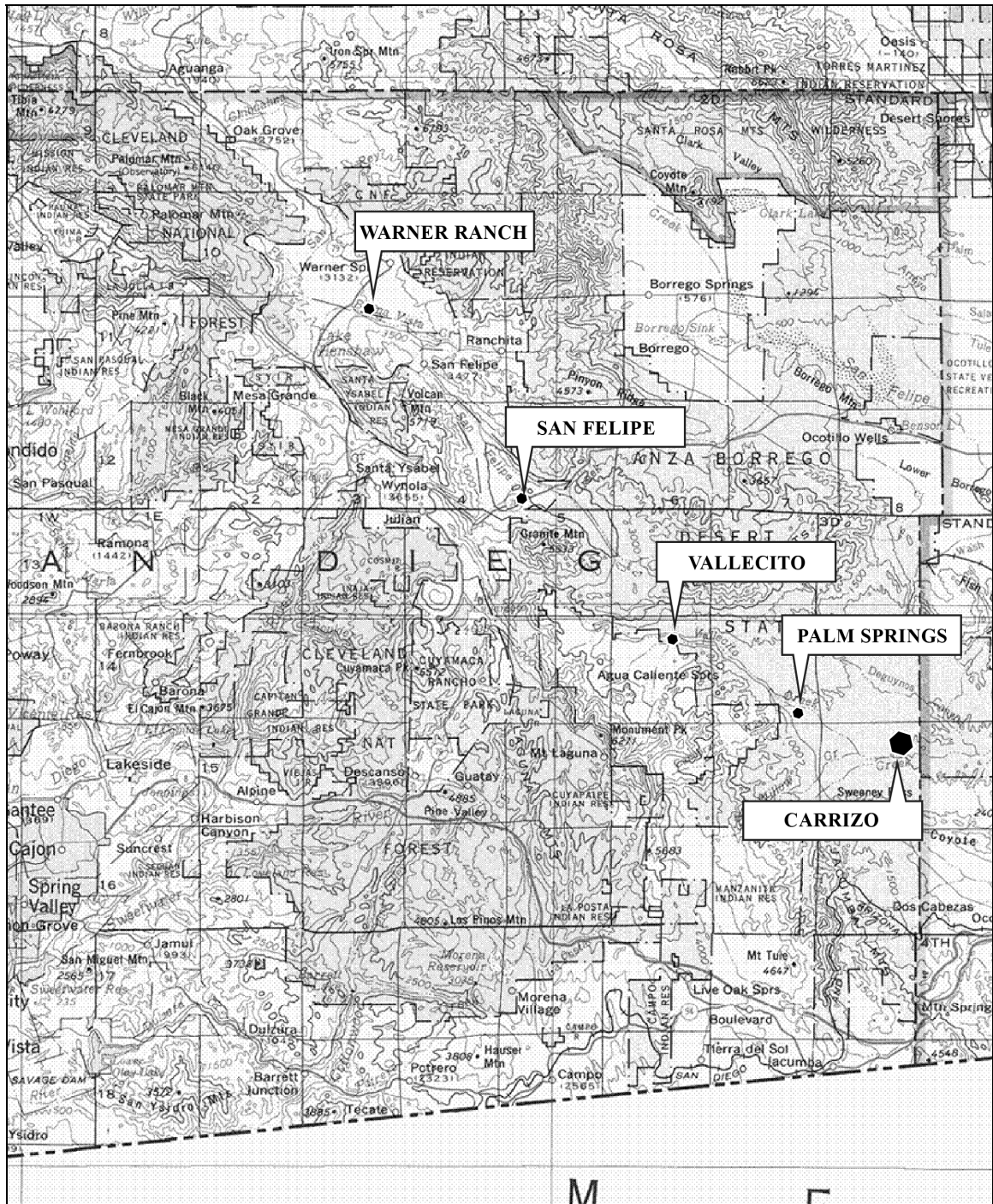


(a) "Ruins of the old Butterfield Stage Station at Carrizo Creek," late 19<sup>th</sup> century, view to northeast (by Frank Stephens, courtesy of San Diego Historical Society, Booth Photographic Collection).



(b) Carrizo Stage Station Site, 1999, view to northeast (by Christopher Wray).

Figure 1. Carrizo Stage Station Ruins, Late 19th Century, and Site, 1999.



San Diego Region, USGS 1:500,000 Scale Map.

Figure 2. Carrizo Corridor Location.

Surface indications and remote sensing results were sufficient to confirm the location and relative stability of the stage station site at San Felipe. Limited shovel test pit explorations unfortunately located no remains at the Palm Springs site. At the current time, it is unknown if or where remains of Palm Springs Stage Station still exist. A systematic archaeological

testing program was implemented at the Carrizo Stage Station site. The initial field test excavations and artifact analysis confirmed the presence of two structures and artifactual remains of the 1857-1870s Carrizo Stage Station.

At the conclusion of the testing, it was determined that the Carrizo Stage Station site is eligible for the National Register of Historic Places because of its association with significant historical events—transportation of people and goods along the Southern Overland Routes—and because it contains important archaeological data concerning the site function and the past lifeways of the occupants. The testing program also identified impacts from natural and human depredations that threatened the site’s integrity and its National Register eligibility. Because of this unavoidable threat of destruction, a data recovery program was recommended for the Carrizo Stage Station site. An engineered erosion control and stabilization plan was recommended to be implemented at the completion of the data recovery effort. Interpretive activities were also proposed including recreation of low adobe walls on the foundation alignment and placement of an interpretive panel. The 150-year anniversary, in 2007, of the construction of the Carrizo Stage Station and the opening of the stage route was identified as an ideal time to commemorate this important segment of California history.

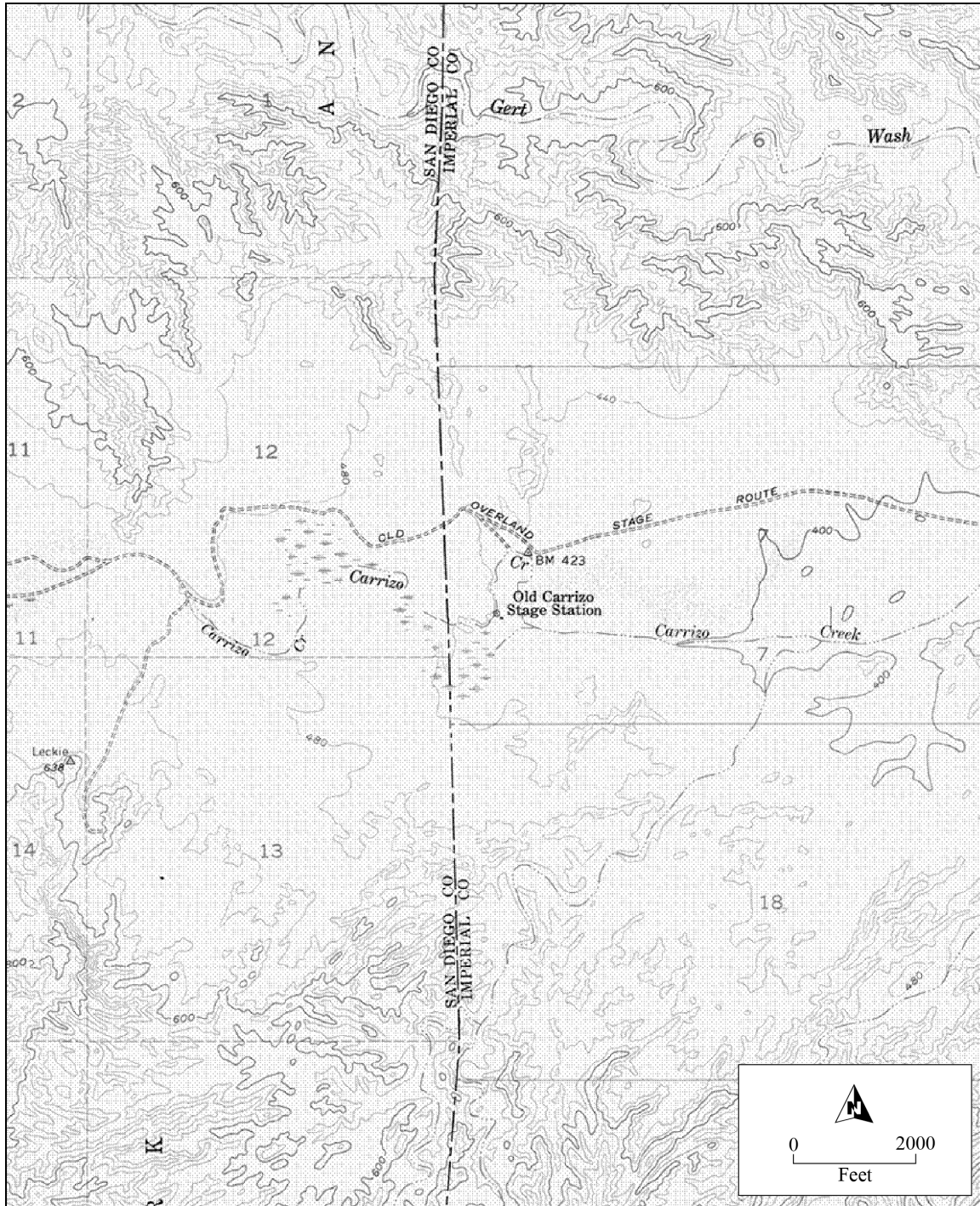
The recommended data recovery excavation program was implemented in 2002 and is the subject of this report. At the completion of the excavations, with assistance by the California Conservation Corps (CCC), the site was covered with porous geo-textile fabric, hand filled with excavation back dirt, and capped with a two-to-four-foot layer of soil. The engineered water diversion measures, to reduce the erosion danger to the site, were constructed by the CCC. While its artifactual information has been removed and documented in this report, the site architecture remains preserved for the future below this soil cap.

## *Chapter 2: Natural Setting and Site Description*

---

Carrizo Creek is a small stream that surfaces as a spring in a sandy wash bottom and meanders for approximately two miles before it is absorbed back into the desert. The Carrizo Creek Stage Station site (Figure 3) is elevated on a small terrace on the northwest side of the creek drainage. Typical desert scrub plant species are present. These include cholla and saltbush, as well as some mesquite. The nearby creek area could be classified as Desert Riparian or Mesquite Bosque habitat, although after hurricane Kathleen, in September 1976, it became thoroughly dominated by tamarisk (Figure 4). The hurricane also resulted in cutting a braid of the creek channel along the east side of the station site. A small mesa about 30 feet high is located 30 to 50 feet west of the building remains. It is capped with cobble deposits typical of the desert pavement that exists on elevated hills in the surrounding badlands.

Prior to excavation, the stage station remains consisted of a small adobe mound approximately 24 to 30 inches high that covered an area of around 25 by 35 feet. Along the eastern edge, erosion from the braid of the creek cut by Hurricane Kathleen had exposed an alignment of foundation cobbles. About ten feet west of the adobe mound is a large earthen dike about four feet in height and ten feet across that runs along the base of the small mesa for a length of about 350 feet. It was designed to collect rain runoff from the mesa and channel it into a reservoir created by the dike's construction across a bowl-shaped topographic feature at the base of the mesa and directly west of the station site. Water flowed over the top of this reservoir in the 1980s, and cut a 7-to-10-foot-wide channel through the dike and along the north side of the adobe mound to a depth of about six feet. The area on the north side of this channel and along the east side of the dike was relatively level. Excavation would reveal that it had been graded when the dike was built in the late 1950s; this grading impacted approximately 50 percent of the station building's remains. The later erosion by Hurricane Kathleen and the breaching of the earthen dike destroyed about 50 percent of what remained after the northern part of the site had been leveled.



Arroyo Tapiado, Carrizo Mtn. NE, Sweeney Pass, and Carrizo Mtn., USGS 7.5-Minute Maps.

Figure 3. Carrizo Stage Station Site Location.





*(a) "Camp at Carrizo Creek," about 1900, view to southeast  
(courtesy of San Diego Historical Society, Booth Photographic Collection).*



*(b) Carrizo Stage Station site, 2001, view to southeast (by California State Parks).*

Figure 4. Camp at Carrizo Creek, 1900, and Carrizo Stage Station Site, 2001.





## ***Chapter 3: Historical Background***

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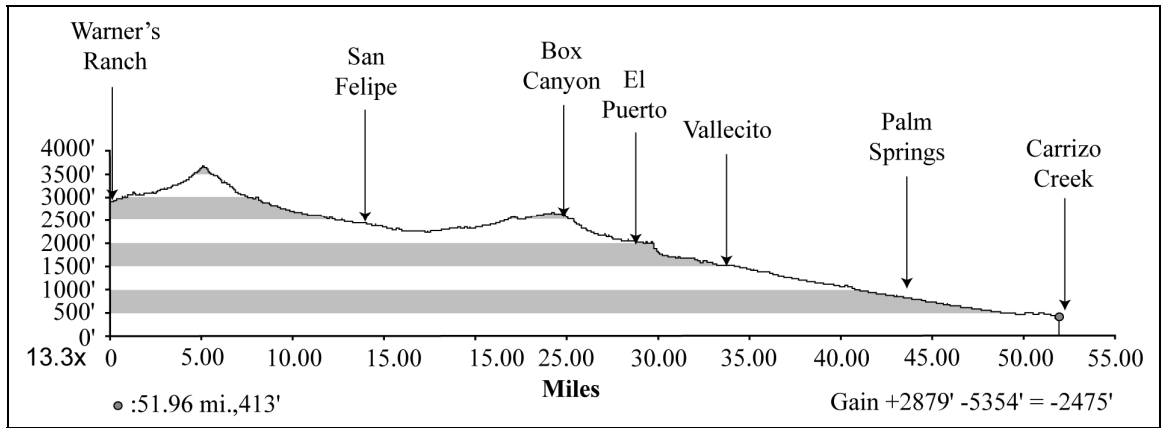
### **INTRODUCTION**

The stage station site is located on the east bank of Carrizo Creek near where a small spring surfaces in the sandy wash bottom, and the resulting stream meanders for approximately two miles before it disappears. Carrizo, in Spanish, refers to a thin bamboo-like reed grass (*Phragmites australis*) that grew in abundance at the spring (Lindsay 2001:107). The location and subsequent stage station constructed there have been known by several variations of the word over the centuries including El Carrizal, Carissita, Cariza, Carrisa, Karissa, Carisso, Carissa, Cariso and Carrizo.

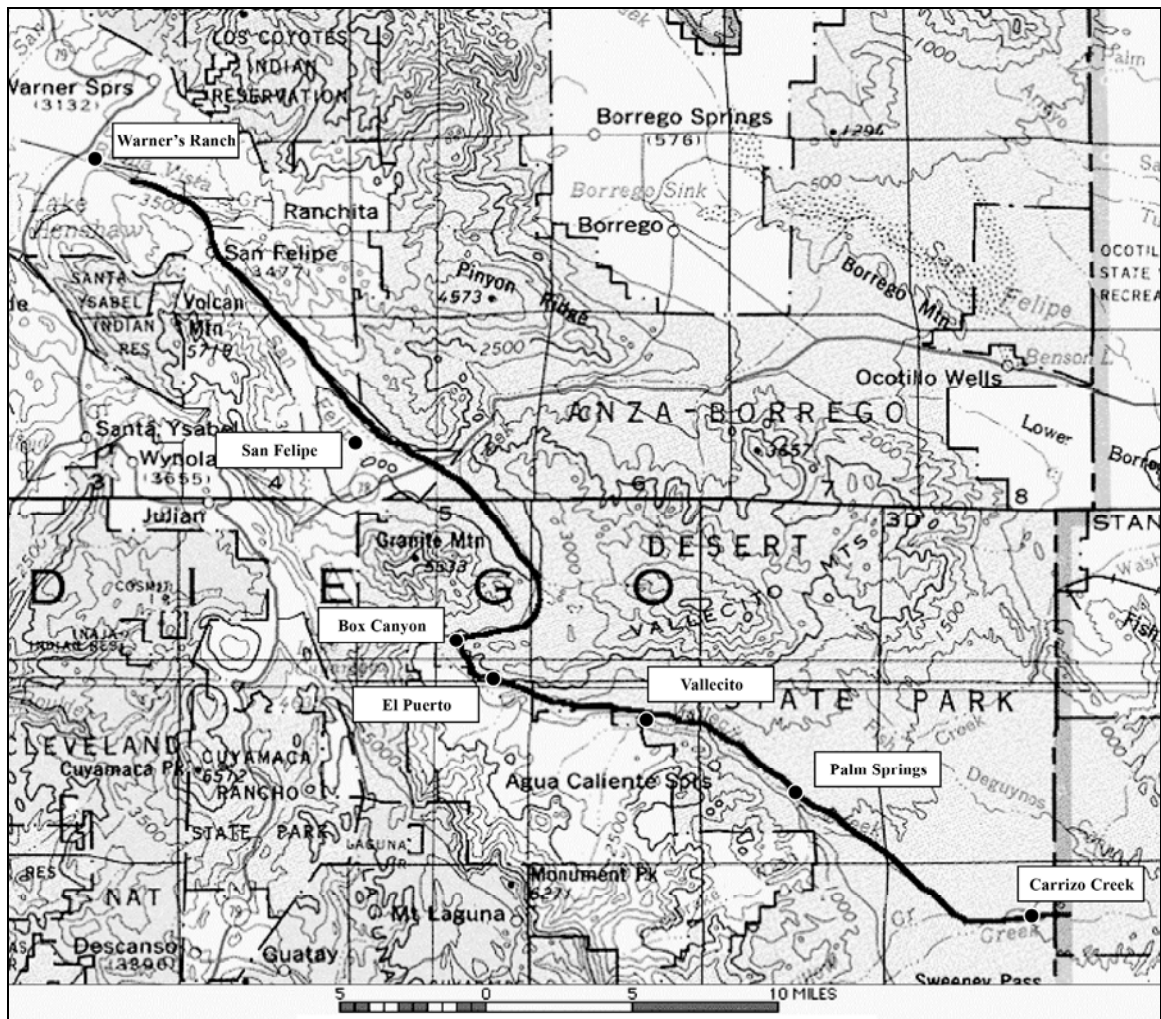
This small stream, which has always been so narrow and shallow that it can easily be stepped across, is one of the most historically significant locations in the Colorado Desert. As the first reliable watering spot after 90 miles of arid wilderness west of the Colorado River, it had been well known and the goal of many travelers on the Southern Emigrant Trail prior to the establishment of the Overland Mail stage station in 1857.

Of the many overland trails used during the vast Gold Rush immigration of 1848-1850, the Southern Emigrant Trail is the least recognized for its importance. Thousands followed it westward from the Rio Grande in New Mexico across the deserts of Arizona and California, and it became the major overland entrance to Southern California prior to construction of the Southern Pacific Railroad. Accounts of travel over the portion between the Colorado River and Carrizo Creek have been considered some of the most difficult records of overland Gold Rush immigration (Wray 2000). After reaching the spring at Carrizo, the overland travelers' situation gradually improved. From this point, at approximately 500 feet above mean sea level, the trail followed the Carrizo Corridor and Warner's Pass through a series of elevated valleys, including Vallecito, El Puerto (present day Mason Valley), Box Canyon, and San Felipe. This route provided reliable water and gradually lifted the emigrants out of the desert until the top of the mountains and good pasture land in San José Valley were reached at Warner's Ranch, 50 miles to the northwest at around 2,800 feet above sea level (Figure 5). Here the arduous desert crossing ended.

The Southern Emigrant Trail's origins preceded the Gold Rush by many decades. Late eighteenth- and early nineteenth-century Spanish and Mexican military explorations first established the route by following Native American trails. It became well used by traders and trappers who journeyed between California and Sonora in the 1830s.



*Elevation Profile Map of Carrizo Corridor and Warner's Spring Pass.*



*Map of the Southern Emigrant Trail Through the Carrizo Corridor and Warner's Pass.*

Figure 5. Elevation Profile and Map of the Southern Emigrant Trail.

The 1840s and 1850s saw invading American armies follow the route to California during the Mexican War, followed by thousands of Gold Rush Argonauts (Figure 6). In 1857, overland mail service was established along the road. This narrative documents the significance of Carrizo Creek within the historical development of the Overland Trail from the late eighteenth century, through establishment of the transcontinental railroad lines in the 1870s.

## SPANISH AND MEXICAN EXPLORATIONS

A series of unrelated explorations by Spanish and Mexican military forces followed original Native American trails and discovered routes and passes that would eventually be connected to become the Southern Overland Road (Tamplin 1979:11-23). The first Spaniard to enter present day Anza-Borrego Desert was Lt. Pedro Fages of the San Diego Presidio, who left San Diego Mission with three soldiers on October 29, 1772, in pursuit of army deserters. They followed Native American trails across the Cuyamaca Mountains and desert via Oriflamme Canyon, Mason Valley, and the Carrizo Wash. Fages traveled over this route two more times, in 1782 and 1785. He discovered many of the points along the Carrizo Corridor that would later become landmarks on the overland trail, including the marshes and springs at Carrizo Creek, Palm Springs, and Vallecito. Continuing southeast into the desert, Fages' route joined the Anza Trail, established in 1776 between Mexico Sonora and San Gabriel Mission (Rensch 1955; Ives 1975; Lindsay 2001).

The trail from Vallecito to Warner's Ranch was not established until the mid-1820s. Father Juan Mariner of Mission San Diego and Captain Juan Pablo Grijalva of the San Diego Presidio entered the San José Valley in 1795 during an exploratory expedition. They named the place El Valle de San José and recorded ten Native American villages as well as the hot springs at Agua Caliente (Pourade 1961:115; Roth 1981:179; Hill 1927:App. I). By the 1820s San Diego and San Luis Rey missions used the valley to graze cattle and sheep (Engelhardt 1920:223-225; Pourade 1961:122). It was not until Mexican military parties began to travel on to the desert that a route would be opened from the mountains to the Colorado River linking the Carrizo Corridor with Warner's Pass and San José Valley.

In the 1820s, explorations established San José Valley as a gateway through the mountains for an overland trail to Sonora and the Mexican interior. In 1825, San Diego Presidio *Alferéz*, Santiago Arguello, while in pursuit of Native American horse thieves, discovered the pass leading from Valle de San José to the desert via the San Felipe Valley. Later, José Romero, captain of the Tucson Presidio, and Lt. of Engineers Romualdo Pacheco, delineated the trail via the San José Valley through Santa Ysabel to San Diego as the official route for overland travel from Sonora to California. An alternative route for travelers wishing to bypass San Diego and reach the coast at a more northerly point led from El Valle de San José through Puerta La Cruz, Cañada Aguanga, and Temecula to San Gabriel and Los Angeles. This would become the main branch of the overland trail 20 years later (Warner 1886:3; Beattie 1925, 1933; Pourade 1961:174).

In spite of establishment of the route, travel between California and Sonora remained infrequent through the 1820s (Tamplin 1979:11-23). Starting in 1827, Sonorans used the route to move to California in order to escape Native American uprisings. Communication regularly came through from 1827 to 1828 (Bean 1962:87-88), but in 1830



Father José Sanchez reported that Native Americans had murdered four Sonorans on the west bank of the Colorado and that travel on that road had decreased considerably in light of this (Beattie 1933:68). The last official use of the road took place in 1834 when Rafael Amador carried dispatches from Mexican President Santa Anna to California governor Figueroa (Hutchinson 1969:65).

In the early 1830s, the Sonora trail became the path of overland traders. In 1832, the Jackson-Young party from Santa Fe, New Mexico, followed the old Anza-Sonora Trail along the Gila River, through present-day central Arizona, to its junction with the Colorado River. They then crossed the desert along the route established by Romero and Pacheco to the San José Valley and continued to Los Angeles. The route was so little used at his time that no one who had traveled between Tucson and the Colorado River could be found to guide them. West of Tucson to the Pima villages at the Gila River, the trail became obscure and difficult to follow. From the Pima villages down the Gila River to the Colorado River and then westward into the desert there was no trail, “not even an Indian path,” until they came to within a 100 miles of San Diego (Warner 1908:189). As a member of this expedition Jonathan Trumbull Warner first crossed the valley that would later become his ranch. Jackson returned by the same route with 600 mules and 100 horses.

Traffic increased during the 1830s and 1840s as livestock traders drove herds of horses eastward to Sonora and New Mexico. Yearly caravans carried “blankets of various colors and qualities, and other coarse woolen goods manufactured in New Mexico” to California where they were exchanged for “Chinese silk goods, fine bleached grass cloth, mules, horses and money” (Warner 1908:189). The route between the Colorado River and Warner’s Ranch became permanently established (Beattie 1925; Cleland 1963:236-237; Weber 1982:135). Water holes were discovered and maintained, and the names assigned, many of which are still known. West of the river, the most difficult part of the trail lay across the Colorado Desert, until the waters of Carrizo Creek were reached. The 90 mile stretch of windblown sand drifts, stone covered terraces, and salt flats with little or no vegetation, had no permanent sources of running water.

After crossing the Colorado River the trail headed south, paralleling the river for about seven miles, to avoid immense sand dunes located directly to the west. The route then turned westward across fine, soft, windblown sand along the southern edge of the dunes. Water along this stretch was obtained from crude wells dug into dry arroyo bottoms. These deep channels had been formed, and flowed occasionally over the millennia, when the Colorado River flooded its banks. The shallow holes, excavated into soft sand that easily caved in, had to be reopened each time they were used. The first well, Los Pozos de la Rajadura (the wells in the cleft), sat in a cleft at the base of a 30-foot cliff in the dry bed of the Alamo River, about 15 miles from the Colorado River (Ellis 1995a). Continuing westward across a barren gravel plain, the road passed through occasional drifts of blown sand for another 24 miles until once again it came to the dry channel of the Alamo River. Here a stunted cottonwood tree marked the location of a second source of shallow ground water. Mexican livestock traders named this spot Alamo Mocho, Spanish for the stunted or short cottonwood, after its most obvious descriptive feature.

Beyond Alamo Mocho, the trail crossed a salt encrusted plain almost destitute of vegetation before it reached the next water hole at El Pozo Hondo (the deep well), some 25 miles further west. Midway in between, at the center of the plain, was La Laguna, a small

pond of saline water unfit to drink. From here the trail veered slightly northwest and shortly reached El Pozo Hondo in the bottom of a dry streambed now known as the New River. The route followed this dry northwesterly trending channel for approximately ten miles, then left the wash and crossed a flat plain of soft gravely sand covered with stunted creosote and other small desert shrubs until it entered the dry bed of Carrizo Wash. From this point, it followed the sandy streambed as it wound between weathered hills of ancient mud sediment until it reached the flowing spring and marsh known as El Carrizal (the cane grove), around 20 miles from El Pozo Hondo (Figure 7). This was the first permanent flowing water source that could be relied upon west of the Colorado River (Couts 1849).

From Carrizo, conditions gradually improved. Water sources could be counted on at regular intervals as the trail rose gradually out of the desert until it reached the summit of the mountains at Warner's Ranch. Continuing in a northwest direction, the route followed Carrizo and then Vallecito Washes for another nine miles before coming to a small spring located in a palm grove. Later travelers named this location Palm Spring. After another nine miles along the same dry streambed, the trail came to the pasture and springs known as El Ojo Grande at Vallecito, where a semi-permanent Native American settlement was located.<sup>1</sup>

Beyond Vallecito, the terrain gradually began to change. Granite outcrops replaced the sandy hills, and desert vegetation gave way to juniper woodland. The road crossed a granitic boulder ridge, today known as Campbell Grade, and reached another marshy area called El Puerto where water could be obtained. Beyond this valley the trail entered a narrow gorge, now known as Box Canyon, and then continued in its consistent northwesterly direction until it reached the waters of San Felipe Creek and another Native American village. Beyond San Felipe the trail left the desert floor and rose gradually into the mountains. The juniper woodland and creosote gave way to chaparral and oak trees. At Warner's Ranch, 15 miles from San Felipe, the San José Valley opened into broad flat grass-covered grazing land.

In the 1840s, Jonathan Trumbull Warner established a ranch in San José Valley. As already noted, he first saw the region in 1832 as a member of the Jackson-Young party. Warner remained in California, settling in Los Angeles. In 1844 he received a grant for the valley and moved there with his family during the winter of 1844-1845. They lived in an adobe house near the Native American village of Cupa at Agua Caliente Hot Springs (Warner 1886:30; Ortego 1856; Bibb 1976; Roth 1981:194). Since that time the area has been known as Warner's or Warner's Ranch and the north end of the San Felipe Valley, leading down into the desert, has often been called Warner's Pass.<sup>2</sup> Although the Mexican livestock traders who established the trail left almost no written documentation of their travels, the fact that the route was well established by the 1840s, and that most of the major watering holes and landmarks had been identified and given Spanish place names that were well known by that time provides testimony to the untold number of successful livestock drives that these hearty Hispanic pioneers completed during the 15 years prior to the American invasion of 1846. Born and raised in the desert, they knew how to drive large herds across arid expanses with little loss. In the decades following 1846, American immigrants drove their own livestock herds across the same terrain, and often met with disastrous results. Until establishment of the railroads in the 1870s, the dead carcasses of horses, mules, sheep, oxen, and cattle marked the trail and every water hole between the Colorado River and Carrizo Creek. When the first American armies traveled this same route



*(a) Carrizo Wash and Mud Hills, 2002, view to west (by California State Parks).*



*(b) Carrizo Wash, 2002, view to west (by California State Parks).*



*(c) Carrizo Marsh and Stage Station Site, 2002, view to west (by California State Parks).*

**Figure 7. Carrizo Wash and Mud Hills, 2002.**

in the mid-1840s they did not find the water holes surrounded by dead livestock, or the trail lined with bleached bones. This fact attests to the skill, knowledge, and ability the Mexican herders who had established and drove large herds along the trail from California to Sonora Mexico and New Mexico in the 1830s and 1840s

## **THE FORCES OF MANIFEST DESTINY AND THE MEXICAN WAR**

During the 1830s and 1840s a belief in the concept of Manifest Destiny became a dominant aspect of American culture and political thought. Proponents were convinced God had willed the American continent, from the Atlantic to the Pacific, to the Anglo-Saxon Protestant population of the United States. They saw the acquisition of new lands as indispensable to the complete liberty of Anglo-Saxon Protestants benefiting from life under the United States Constitution. America's ordained mission called for an expansion of "the area of freedom," but British designs on Oregon and the unstable and weak Mexican Republic were obstacles (Ruiz 1963:55). In 1845 voters elected James K. Polk President on a platform that included the acquisition of Oregon and California. Oregon was obtained through negotiation. When the Mexican government refused to consider an offer to purchase California, the President provoked hostilities through a dispute over the southern boundary of Texas. A joint resolution of both houses of the United States Congress declared that a state of war existed between the United States and the Republic of Mexico on May 13, 1846 (Harlow 1982:55-57).

The United States' conquest of Northern Mexico and the subsequent settlement of California that followed had a major impact on development of the Southern Overland Trail, as the forces of Manifest Destiny took over the west. Beginning with the Mexican-American War of 1846-1848 and until the completion of the Southern Pacific railroad in the mid 1870s, the Carrizo Corridor and Warner's Pass became part of a major passage for overland migration and communication along the Gila River route. The movement began with military expeditions. Following earlier trails established by Spanish and Mexican explorers and Sonora and Santa Fe traders, invading American armies marching to California established an overland route from Texas through Arizona along the Gila River to where it joined the Colorado River at present day Yuma, Arizona (Trafzer 1980). From the junction of the two rivers, the trail followed the already well-established route across the Colorado Desert and northward along the east side of the Peninsular Range through the Carrizo Corridor, San Felipe Valley, Warner's Pass, and San José Valley. The trail to San Diego forked to the southwest at this point, running through Santa Ysabel, while the main road continued northward to Temecula and Los Angeles (Warner 1886:1-6, 19-20; Bibb 1995). General Stephen W. Kearney's Army of the West crossed the desert between the Colorado River and Warner's Ranch in early December 1846, followed by General George Cooke's Mormon Battalion in January 1847 (Tamplin 1979:24-34; Pourade 1963:124; Beattie 1925, 1933).

### **The Army of the West**

The Army of the West, under the command of Brevet-Brigadier General Stephen Watts Kearney, consisted of 1,658 men that included horse-mounted dragoons and a detachment of topographical engineers headed by Lieutenant William Hensley Emory. Following commencement of hostilities with Mexico, they left Fort Leavenworth, Kansas, in June 1846, with orders to secure New Mexico and continue on to California. Meeting little resistance, Kearney easily established United States military rule and took possession



of Santa Fe on August 18. Leaving most of the detachment behind, he headed west on September 25 with 300 men, including Emory's engineers. After eight days on the trail they met the famous overland scout Kit Carson. He had been sent from California to Washington D.C. with dispatches from John C. Fremont stating that the Pacific Coast had been conquered. Kearney sent 200 of his men back to Santa Fe and ordered Carson to guide him to California.

When the Army of the West arrived at the junction of the Gila and Colorado rivers in late November 1846, they found the latter to be a wide, shallow, muddy, dingy red-colored stream resembling the Arkansas and Missouri Rivers. It flowed through a wide valley covered in a dense growth of mesquite and other "bushes" with an occasional cottonwood tree. After crossing at a ford some six miles south of the junction with the Gila, the army continued westward along the southern edge of the sand dunes to the first well, at La Rajadura, and camped (Wray 2000). Lt. Emory recorded that they "encountered an immense sand drift, and from that point until we halted, the great highway between Sonora and California lies along the foot of this drift, which is continually encroaching down the valley" (Emory 1848). The Lieutenant's use of the term "the great highway between Sonora and California" indicated the trail could be easily followed as a result of the extensive use it had received by Mexican traders during the previous decade. Upon reaching the first watering spot, the soldiers found a hole five to six feet deep in the bottom of a dry arroyo located a few feet to the left of the road. By digging, they obtained enough water for the men and animals (Turner 1846; Emory 1848).

The march resumed at dawn the following morning. The trail followed the base of the dunes for another four miles and then veered slightly northward until it reached Alamo Mocho. In the mesquite-filled arroyo, Kearney's forces located a large hole. They reopened this well and excavated another. Both reached a depth of 15 to 20 feet below ground surface before encountering water. The Dragoons wove a "basket work of willow twigs" around the sides to hold back the caving sand (Emory 1848). Water was finally obtained late that night "...the very worst it was ever my misfortune to drink. It took all night to water the animals—two buckets full each was all that was allowed—and an officer stood by to see division fairly made. Some of our mules being wild and unused to such attention refused to have anything to do with the water." For these the bucket had to be buried in the sand or covered with grass or mesquite beans (Griffen 1846).

Over the next two days the Army of the West faced the hardest section of the road. Both men and animals suffered from fatigue as a result of water, food, and sleep deprivation. For reasons unknown, they crossed the salt flat of La Laguna but missed the water hole at El Pozo Hondo, traversing the entire 54 miles from Alamo Mocho to Carrizo Creek without replenishing water supplies. This part of the desert was practically destitute of vegetation. The soft sand exhausted the horses and mules and many began to collapse. The Army reached the brine-filled pond at Laguna at around 8 o'clock that night. Finding its water unfit to drink, they rested until 4 a.m. and then continued. Emory wrote "we groped silently our way in the dark. The stoutest animals now began to stagger, and when day dawned scarcely a man was seen mounted." As the sun rose a heavy fog blew in from the Gulf of California. The men's hair and the manes of their mules became "quite wet", providing some relief. When the fog lifted they found themselves entering a "gap in the mountain which had been before us for four days," formed by the course of Carrizo Creek. The first members reached the waters of the spring and marsh at noon (Emory 1848).

At Carrizo the Army halted, making camp “at the source, a magnificent spring, twenty or thirty feet in diameter, highly impregnated with sulfur... The spring consisted of a series of smaller springs or veins.” Emory described the vegetation as “cane, rush, and a coarse grass, such as is found on the marshes near the sea shore.” The water flowed for only a short distance. “Within a half a mile of one of its sources ... the sands had already absorbed much of its water, and left but little running.” A mile or two below the spring the creek disappeared entirely (Emory 1848).

The running creek refreshed both men and livestock. The horses and mules grazed on the cane and grass and enjoyed the first water they had seen in more than 36 hours. In his journal, Henry Smith Turner described the relief and ecstasy all felt:

*November 28, Saturday*—Started an hour before day, marched 22 miles to Karissa Creek, the west end of this laborious journey. We have lost many animals in crossing it but thanks be to God we are through it, and have made fewer sacrifices than any of us expected. We have great cause to be thankful to Almighty God for His goodness to us, and from the bottom of my heart I feel gratitude. [Turner 1846]

John Griffen recorded conditions in camp:

After getting in camp we all felt quite comfortable, and as we had had nothing like cooking for several days every man turned out the best he had—a canister of potted meat and a cup of tea—with a brandy toddy were the greatest luxuries that could be found—and we went at them with a will. We supped out. I took one supper at home—drank penola with Carson—& wound up in the evening by eating again with Captain Moore—it seemed to me that there was no such thing as quenching my thirst. I drank tea and water until I could stand no more, and yet I was thirsty and every one complained of the same. Many of the messes had nothing but a pure vegetable diet—that is to say, bread—made of salt & flour & water or a little boiled corn, or beans, with not even meat enough to grease it—among the number in this situation was the general. The Engineer camp were even worse off it was reported that they had nothing at all for the men employed in the department, a Mexican who they had to herd their mules had stolen from them, and sold the provisions to another Mexican trader who was allowed to travel with the troops ... the question was seriously mooted whether a mule should be killed or not. It was not done—but I suppose will be at the next camp—as we are fully seventy miles from any settlements. [Griffen 1846]

Overall the Army had suffered badly, forced to leave many animals “on the road to die of thirst and hunger” between Alamo Mocho and Carrizo “in spite of the generous efforts of the men to bring them to the spring. More than one was brought up, by one man tugging at the halter and another pushing up the brute, by placing his shoulder against its buttocks.” Emory felt that the most serious loss had been “one or two fat mares and colts brought with us for food; ... Major Swords found in a concealed place one of the best pack mules slaughtered, and the choice bits cut from his shoulders and flanks, stealthily done by some mess less provident than others” (Emory 1848).

With rations low and the forage at the spring inadequate for their livestock, the Army of the West resumed their march on the morning of November 29 toward Vallecito.

Still fatigued, they continued “at a snail’s pace,” passing the grove of palms at Palm Springs. “The day was intensely hot, and the sand deep; the animals, inflated with water and rushes, gave way by scores.... It was a feast day for the wolves, [actually coyotes] which followed in packs close on our track, seizing our deserted brutes and making the air resound with their howls as they battled for the carcasses.” Although only 19 miles from the water at Carrizo many members of the detachment did not reach the “little pools” of Vallecito until 10 o’clock that night (Emory 1848).

Vallecito is a picturesque spot, nestled in a small flat plain approximately a half-mile wide. Granite boulder hills border the edge of the valley on the east. On its western side the granitic peaks of the Peninsular Range rise abruptly to heights of more than 3,000 feet. Although described as salty, the grass that grew here seemed suitable for the livestock and extended for a mile or two along the valley. Kearney halted for a day to rest men and animals. A horse was killed to feed the famished dragoons (Emory 1848).

As they camped, winter set in. A heavy, dark cloud bank covered the mountains on the west side of the valley and a cold wind blew a “hurricane” from that direction. Yet the sky above the camp remained clear as the threatening clouds stayed over the peaks and did not move eastward on to the desert valley. The crossing continued on December 1. The clouds had cleared, revealing the western mountains covered in snow. The soldiers marched into a cold wind from the northwest, passing through the narrow gorge at present-day Box Canyon and reaching the Native American village at San Felipe at dark, which they found deserted. The following day they followed the San Felipe Valley northward and reached Warner’s Ranch. Emory described their relief at leaving the desert:

We commenced to ascend another divide and as we approached the summit the narrow valley leading to it was covered with timber and long grass. On both sides the evergreen oak grew luxuriantly, and, for the first time since leaving the States we saw what would even there be called large trees. Emerging from these we saw in the distance the beautiful valley of Agua Caliente, waving with yellow grass, where we expected to find the rancheria owned by an American named Warner.... The rancheria was in charge of a young fellow from New Hampshire named Marshall. We ascertained from him that his employer was a prisoner to the Americans in San Diego, that the Mexicans were still in possession of the whole country ... that we were in the heart of the enemy’s stronghold, ... and that we were now in possession of the great pass to Sonora....

To appease hunger, however, was the first consideration. Seven of my men eat, at one single meal, a fat full grown sheep. Our camp was pitched on the road to the Pueblo [Los Angeles], leading a little north of west. To the south down the valley of the Agua Caliente, lay the road to San Diego. Above us [at the hot springs Indian village] was Mr. Warner’s backwoods, American looking houses, built of adobe and covered with a thatched roof. Around were the thatched huts of the more than half naked Indians.[Emory 1848]

The Army of the West had not yet seen the last of its hardship. While marching from Warner’s Ranch to San Diego they engaged a band of Mexican Californio guerilla fighters under the command of Don Andres Pico at San Pasqual with disastrous consequences.<sup>3</sup>

## **The Mormon Battalion**

Following six weeks behind the Army of the West was Colonel Phillip St. George Cooke with the Mormon Battalion (Tamplin 1979:30). Their mission was to open a wagon road to California. The widening and leveling of the original trail so wagons could pass made possible the incredible overland migration that would occur in less than a decade (Pourade 1963:124; Beattie 1925, 1933).<sup>4</sup>

The Mormon Battalion consisted of 500 volunteers of that religion attached to the Army of the West for 12 months, by order of President Polk. Kearney originally placed Captain James Allen of the First Dragoons in command. Following behind the regular troops, the Mormons left Council Bluffs, Iowa, on July 20, 1846, marching to Fort Leavenworth where they trained. On August 12 they left for New Mexico. Captain Allen died en route and Lieutenant Smith took command. The battalion reached Santa Fe after Kearney had departed. Upon receiving word of Allen's death, General Kearney ordered Colonel Philip St. George Cooke to return to Santa Fe and take command of the Mormons. They were to follow and open a wagon road (Tamplin 1979:21).

The Mormon Battalion reached the Colorado River on January 8, 1847, with 350 men and five officers' wives. They crossed the river on January 10 and continued westward on the afternoon of December 11. The soft windblown sands along the southern edge of the dunes proved to be exceptionally difficult for the mule teams pulling wagons. They began to give out before reaching La Rajadura, and two teams were abandoned (Cooke 1847; Bigler 1847).<sup>5</sup>

An advance party, sent ahead of the wagons to find and prepare the well for their arrival, encountered the hole filled in with a dead coyote in it. They dug out the old excavation and started another. The first wagons began to arrive at sundown. However, the caving sandy side made it impossible to accumulate more than a couple of inches of water until Colonel Cooke ordered a wash tub, with the bottom knocked out, to be placed in the first well. This worked for a while, but then the water ceased. Finally the second well reached a flow of water more than ten feet below ground surface that could be dipped out with a camp kettle. At 10:30 that night Cooke ordered a group of 13 to leave in the morning for Alamo Mocho and prepare that source (Cooke 1847; Bigler 1847).

By 11:30 the following day, three companies had watered their mules and began the days' march, leaving the rest of the battalion to follow. Two more wagons and a trunk of tools were abandoned. The soft sand continued to be a burden for the wagon teams. After covering only 11 miles, Cooke established camp at a patch of "scant straw colored grass" at sunset in "a wilderness of sand, mixed with gravel and small stones; the only vegetable production a slim bush, which the New Mexicans call 'stinking wood' " (Cooke 1847; Bigler 1847).

The crossing resumed the following day at sunrise. The Mormons traveled the remaining 13 miles to Alamo Mocho by 2 o'clock that afternoon. The advance party had also found this water source filled in, with four dead coyotes in it. They cleaned it out and began another. Cooke noted: "The Alamo Mocho well is near the foot of a very steep bank, perhaps eighty feet down to a remarkable depression of great extent and as wide as a great river; and most likely it is the bed of one, or of a dried up creek of the Gulf. The flat bottom is grown up with mesquite" (Cooke 1847). Although the wells produced sufficient water, Cooke complained that "Now after eight hours, the watering is still going on; the poor

animals after drinking the impure water, seem unsatisfied, and have to be driven away to the bushes on which to browse” (Cooke 1847).

Livestock watering continued all night. Early the next morning an advance party of 25 left to locate and prepare El Pozo Hondo. The battalion continued to draw “the scant water” from the wells for the mules and cattle until 11 o’clock when the march resumed. As with the Army of the West, the 55 miles from Alamo Mocho to Carrizo Creek proved to be the most difficult section of the trail for the Mormons. Deprived of sufficient food, water, or rest, the fact that they found the watering spot at El Pozo Hondo did not relieve their toil. The battalion followed the “tracks of hundreds of mules and horses; herds believed to have been driven within a few months to Sonora.” They crossed “some bad sand” and then “a great flat of clay.” After 17 miles, sundown found them at a mesquite thicket where they dry camped (Cooke 1847).

Marching at sunrise the next day, the battalion covered the seven remaining miles to El Pozo Hondo by 11 o’clock. Here they found two Mexican Californio vaqueros with a herd of 35 horses and mules and some beef cattle, sent for their relief by General Kearney (Pourade 1964:125). In spite of the best efforts of the advance party, the well failed to produce sufficient water. As with all previous water holes, this one had a dead coyote in it. After removing the carcass the mules sent by Kearney were allowed to drink from the well in order to “clean it out.” After this, in spite of repeated excavation, the small trickle that remained did not suffice even to fill canteens (Cooke 1847; Bigler 1847).

The new livestock did provide fresh meat and animals to replace the exhausted wagon teams. For the first time the Mormons witnessed the skill of the Californio vaqueros. “Most of the animals had never been broke and were tolerably wild, and it was diverting to the soldiers to see how handy the Spaniards were in throwing the lasso and catching the animals the Colonel wanted to use.” One of the fresh beeves was killed and dressed, “with orders to cook and eat and be on the march in one hour and a half for the next water and grass” (Bigler 1847).

The march continued that afternoon. They covered an additional 11 miles by nightfall and made a dry camp for the second evening. Cooke noted that “...the mules were kept tied and some bunch grass was cut and fed them.” Besides being nearly starved, the mules had gone without water since the previous morning at Alamo Mocho. Now “the men too,” were without it. The Colonel determined it necessary to go on “in the cold night speedily to end this terrible state of things” (Cooke 1847).

At 2 a.m., January 16th the march resumed. Cooke described the hardship and confusion:

I had a large advance guard and all the guides on duty, telling Weaver not to lose sight of the leading wagon; it was starlight. Four miles from our bivouac I stopped until all had passed, and found that even then a team or two had apparently given out. I gave various orders of relief, transferred mules, etc.; toward daylight it was exceedingly cold, too much so to ride; then the guides got lost, and, by their not obeying strictly my orders, the wagons lost at least a mile; here the new teams seemed almost exhausted; two companies had lost harness and I managed to find some for them. I found the road was about to prove much longer than I had been informed. About 10 o’clock in the morning as usual, it became of summer heat. Finally, near eleven, I reached,

with the foremost wagon, the first water of the Cariza;—a clear running stream gladdened the eyes, after anxious dependence on muddy wells for five or six days. One company, which met with an accident, was so far delayed into the heat of the day, that the mules entirely failed several miles off; a new team had to be sent, and the wagon came up at sunset. I found the march to be nineteen miles; thus without water for near three days, (for the working animals) and camping two nights, in succession, without water, the battalion made in forty-eight hours, four marches, of eighteen, eight, eleven, and nineteen miles, suffering from frost, and from summer heat. Considering this, it seems certain that the fifty-six miles from Alamo Mocho, could have been made without great loss in no other way;—the divisions of time for rest, the stop only for a drink and refreshment of meat in the heat of the day, and the cold night marches. [Cooke 1847]

This was the worst day of the crossing. Men and livestock were strung out all along the trail and it took the rest of the day for them to straggle in. Some had collapsed “for want of water - tired, weak, faint, and hungry.” Twenty mules had to be left, too weak to continue (Bigler 1847). They found the pasture at Carrizo to be “dry and salty” (Cooke 1847).

After a brief rest, the battalion resumed its journey the following day, January 17th, starting about noon. Finding no grass at Palm Springs, they continued to Vallecito; “a wet swampy valley, with willow bushes, bad rank grass and no fuel.” Wagons and mules continued to struggle in the sandy washes. “That this fifteen miles of very bad road was accomplished under the circumstances, by mules or men, is extraordinary. The men arrived here completely worn down; they staggered as they marched, as they did yesterday” (Cooke 1847).

Many of the men did not reach camp until the next morning. Like the Army of the West, the battalion rested here for a day and the men mended clothes and cleaned guns (Bigler 1847). Supplies were low and only eight wagons remained. Rest brought some relief and Cooke noted that “The men, who this morning were prostrate, worn out, hungry, heartless, have recovered their spirits to-night, and are singing and playing the fiddle” (Cooke 1847).

Continuing toward San Felipe on January 19th, the battalion crossed two major obstacles for the wagons. After the first four miles they came to the granite ridge of El Puerto Grade.<sup>6</sup> Wheeler, the guide, reported to Colonel Cooke that he could see no way through and believed them to be “penned up.” The Colonel ordered him to find a crossing (Cooke 1847). “Ropes were fastened to the wagons, and every man that could get a hold pulled until all got over,” falling into the small valley of El Puerto on the other side (Bigler 1847). In a few more miles they turned and entered the wash of present day Box Canyon. Here the steep walled passage became too narrow for wagons to pass through. After a few yards the canyon opened again only to run against a steep ledge that blocked their way. A hill on the east side of the canyon had to be ascended to get around this obstacle. A “great rock” blocked the steep slope of this hill and, so, also had to be broken away before wagons could pass. The Mormons began to cut the rock away at both points with picks and axes. As the road crews worked, others lifted wagon boxes from their running gear and carried them through the narrow passage. They were then reassembled. The “great rock” proved to be less of an obstacle and was quickly removed. Colonel Cooke saw a wagon pulled “up the very steep hill,” where the “great rock” had been, “and down again into the canyon.” Finally enough stone had been chipped away from the narrow canyon walls that the last two wagons

were pulled through by mules, “with loads undisturbed” (Cooke 1847). They camped that night, once again, without wood and water (Bigler 1847).

The next day they continued northward. The wagons negotiated another steep narrow rocky pass, presently known as Foot and Walker Grade, with the aid of ropes. A “good descending road for seven miles led to San Phillippi (sic.)” and the still deserted Native American village. They camped by the flowing creek and killed two “beeves” for breakfast. The following day the battalion marched up San Felipe Valley for seven miles and camped. “Everything began to look like there was life in it. The mountains began to show timber and along the creeks the live oak was abundant” (Bigler 1847). On January 21 they marched another 10 miles and arrived at Warner’s Ranch.

## **GOLD RUSH MIGRATION – INTERNATIONAL BOUNDARY AND RAILROAD SURVEYS**

The Mexican War ended while the Mormon Battalion had been engaged in its desert crossing. On January 24, 1848, three days after the battalion reached Warner’s Ranch, gold was discovered at Sutter’s Mill in northern California, launching the California Gold Rush. Nine days later on February 2, the Treaty of Guadalupe Hidalgo transferred ownership of California, along with territory that included the present states of Arizona, New Mexico, Nevada, Colorado, and Utah, to the United States. The Mexican Republic had lost approximately one third of its territory to the forces of Manifest Destiny.

The discovery of gold dramatically changed the dynamics of overland travel along the Gila River and Sonora trails. Within a year 80,000 people had traveled to California from around the world (Greeley 1987:14). Thousands of gold rush emigrants from the U. S. and Mexico used the Gila River route. Mexicans were among the first to learn of the strike, receiving the news from passing ships. Exact numbers are difficult to estimate. Some sources claim that between six and ten thousand Sonorans from Mexico followed the route during 1849 and 1850. Traveling in family groups, many migrated to the Northern California gold fields each spring and returned to Sonora in the fall (Roske 1963:198-199; Beattie 1925; Kenny 1967). Another source says that more than 12,000 Argonauts followed the route in 1849 (Pourade 1963:142). Dr. A. L. Lincoln, who had established a ferry to cross the Colorado River at its junction with the Gila, claimed that in three months during 1850 he crossed more than 20,000 people (Roth 1981). This would have averaged over 200 a day.

Known as the “Gila Trail” or the “Southern Route,” the way to California through New Mexico and Arizona had various points of beginning. The road was fed by a number of trails, including those followed by Kearney and Cooke from the Missouri River, others originating in Texas at San Antonio and El Paso, and overland tracks out of central and northern Mexico. The various trails converged on the Gila River Valley, which funneled the emigrants into Yuma Crossing, where the Gila River joined the Colorado River (Ellis 1995a).

### **Crossing the Colorado Desert**

Beginning in 1848, the Overland Trail between Warner’s Ranch and the Colorado River began to experience its most intense period of use, which would last for the next 15 years. The thousands of gold seekers on the route required constant protection and assistance. Military commands continually traveled between San Diego and the river, adding to the immense amount of traffic already on the road. The need for a military

presence in the region brought the permanent establishment of Fort Yuma, overlooking the junction of the Gila and Colorado rivers, in January 1852. In addition to military activity, this period also saw additional government expeditions. Detachments assigned to map the new boundary with Mexico, and explore probable railroad routes, followed the road. Finally in 1857, the Southern Route became part of the first transcontinental overland mail service.

Many emigrants, exhausted and out of supplies, left the main overland trail and headed west to San Diego, where they could get a ship to San Francisco or re-supply and head northward up the coast to rejoin the trail to the gold fields at Los Angeles. Between Carrizo Creek and Warner's Ranch were four distinct cutoffs to San Diego: one left the trail at Carrizo Creek, one at Oriflamme Canyon just north of El Puerto, one at San Felipe, and one at Warner's Ranch.

Andrew B. Gray, Official Surveyor of the United States Boundary Commission, pioneered the Carrizo cutoff, a trail for horses, mules, and pack trains, in the fall of 1849. The route followed Carrizo Wash to Carrizo Canyon, then up present-day Rockhouse Canyon, and across McCain Valley, through present-day Campo and Tecate, and down the Tijuana River Valley to San Diego. (Ellis 1995b; Gray 1849). This route was followed by H.M.T. Powell in November 1849 (Ellis 1995b:29-31; Bachman 1849; Powell 1849).

The Oriflamme cutoff followed Fages' original route up present-day Oriflamme Canyon, through Cuyamaca Valley, Green Valley and Descanso, then westward through present-day Viejas Valley and Alpine before descending to the bed of the San Diego River near current Lakeside (Ellis 1995b:31; Audubon 1849; Durivage 1849).

The trail from San Felipe headed west from the Native American village San Felipe and followed present-day Banner Canyon, reaching the top of the mountain near the current town of Julian. From here two trails led westward down the mountain to Santa Ysabel and joined the wagon road from Warner's Ranch (Ellis 1995b:29-31).

A trail from Warner's Ranch via Santa Ysabel and the San Pasqual Valley to San Diego had existed since Spanish missionaries discovered the San José valley in 1795. It became the only way to get wagons from the desert to San Diego. In September 1849 Lt. Cave J. Coats, commanding Company A of the First Dragoons, pioneered a road from Mission San Diego to Rancho Santa Maria, at present-day Ramona, which intersected the trail to Warner's Ranch and shortened the trip (Bibb 1995; Ellis 1995b:29). The San Pasqual Valley trail also became a wagon road and was later used by the overland stage (*San Francisco Herald* 11-25-1857).<sup>7</sup>

During the first year of the gold rush, travelers on the Gila trail consisted largely of people from Sonora and other regions in Mexico. In November 1848, a battalion of Army Dragoons, under the command of Major Lawrence P. Graham, en route from Chihuahua, Mexico to California, arrived at the Colorado River. Colonel Cave J. Coats' diary of the journey noted the large number of Mexican gold seekers on the road. On November 25, they met a small party "...going after their families in Sonora." A San Francisco newspaper carried by this group reported that gold dust, valued at \$16 an ounce, was the circulating medium in San Francisco. During the arduous desert crossing, not unlike those experienced by the Army of the West and the Mormons, Coats noted that "Persons, Mexicans from Sonora, are passing us daily on their way to the *abundancia*, the gold mines. This is all we hear, the Mines" (Coats 1848:12-10). Graham's battalion suffered substantially during the crossing, abandoning livestock and wagons. On December 1, with "the mules ... dropping



dead in harness, their tongues swelling up & etc., and the men nearly as bad off for water,” they reached the spring at Carrizo Creek. Here they rested for a day and, although “a little brackish, ... the men ... declared it the finest water they ever drank.” At Carrizo, they found a contractor sent to meet them with a herd of “40 odd beeves.” The Dragoons “had been on a single pound of flour for their rations for over two weeks and ... beef, beef, beef, flew through the camp like fire! A smile was on everyone’s countenance” (Couts 1848).

Graham’s battalion continued to Vallecito where they remained while detachments returned to bring in wagons and livestock that they had been forced to abandon between La Rajadura, now also known as Cooke’s Well, and Carrizo Creek. Coutts complained of snow, cold northerns, rain, “and no wood, with bad water, and horses and mules dying all around us” (Couts 1848).

The gold frenzy continued and began to create additional problems as all available supplies and personnel were diverted to northern California. Coutts ranted on December 17:

No corn, provisions scarce, men all deserting and going to the gold mines! Everybody crazy on the subject, rather hard for us to contemplate upon! Four fine companies, with nearly two hundred horses, all to be now lost! Men for gold, horses for want of forage! The mania that pervades the whole country, our camp included, is beyond all description or credibility. The whole state of Sonora is on the move, are passing us in gangs daily, and say they have not yet started. Naked and shirttailed Indians and Mexicans or Californians, go and return in 15 or 20 days with over a pound of pure gold each, per day, and say “they had bad luck and left.” In Los Angeles and San Diego a man in fitting out a party of 5 or 10 men for the mines has only to go to a merchant and borrow from one to two thousand dollars and give him an “order on the gold mines.” Nothing apparently sells for less than an ounce of gold. If the Government manages it properly, or luckily, it will be the richest nation on earth, if unluckily, California will prove an ulcer that will follow her to her long and unhappy home. [Couts 1848]

On December 21, a party passed that was led by two Americans traveling from Sonora, “with 60 Hiaqui Indians and Mexicans for the gold regions. The cry is ‘Still they come!’ ” (Couts 1848).

By the summer of 1849, thousands of Argonauts from the United States had joined the migration to California. As the weather grew warmer, throughout the spring and summer, the desert between the Colorado River and Carrizo Creek became a formidable barrier. Temperatures in the region breach 100 degrees Fahrenheit by the middle of June and by August highs above 115 are a daily occurrence. None were prepared for the hardship that awaited them. Many tried to cross at night but often lost their way after the moon set. Daytime crossings in the life threatening oppressive heat pushed all to the extremes and it is miraculous that no deaths are recorded. John E. Durivage, correspondent for the *New Orleans Daily Picayune*, described his passage between Cooke’s Well and Alamo Mocho on June 24, 1849:

The heat was intense.... By ten o’clock in the morning the rays of the sun poured down upon our devoted heads with the utmost intensity. The animals faltered and staggered in their tracks; one half of our little party were on foot; and the signs of the times around us were such as to alarm the most intrepid.

The scorching, seething sun provoked the most intolerable thirst, and none had that with which to allay it; those who had supplied themselves most liberally with water having exhausted their precious store. The dejected countenances, the unnatural brilliancy of the eye, and the inflamed veins in the face gave token to the sufferings of the men—of those on foot, especially. [Durivage 1849]

The following day, the crossing became even more difficult when “A hot and disagreeable wind” that had been blowing all day “became perfectly dreadful. Charged with the most intense heat, it came across the plain with the greatest violence, and it was with difficulty that the pedestrian could breast it ...” It became “oppressive to breathe and move, and the strongest limbed staggered under its withering influence” (Durivage 1849).

As exhaustion, thirst, hunger, and disorientation overcame the emigrants, many became overwhelmed with desperation and panic. A number of Durivage’s companions grew frantic from thirst and fatigue. “There was many a quailing and sinking heart, ... and many a fervent, silent prayer offered up to the Throne of Grace.... A young friend of mine told me that he felt he must give out, and begged me for God’s sake to bring him water if he did. The froth stood on his lips, and he could hardly articulate, while his blanched cheek denoted the dreadful thirst and exhaustion under which he was laboring” (Durivage 1849:6-24). Following three days behind, on June 27, the party of A. B. Clarke suffered equally from oppressive heat. They stopped in the afternoon, some in the shade of an abandoned wagon, others under a blanket hung from a creosote or mesquite, resuming the trail after sunset before the moon rose. In the darkness it became “difficult to keep the trail.” As fear and apprehension set in many began to cry out “in the most extravagant expressions, declaring that we had lost the way—should never find water—all perish & etc. Others said nothing, but jogged steadily on with a fixed determination to persevere” (Clarke 1849).

As with the Army of the West and the Mormons, the 49ers found the desert wells at La Rajadura—which they began to call Cooke’s Wells—Alamo Mocho, and El Pozo Hondo to be shallow holes in the sand that had to be continually re-excavated before a trickle of muddy water could be induced to flow. The “intolerable stench of dead animals” now permeated the air around these water holes, as livestock abandoned in the desert had returned to caved-in wells to die (Durivage 1849:6-24). The water at El Pozo Hondo was “a tincture of bluelick, iodides of sulfur, Epsom salts, and a strong decoction of decomposed mule flesh.” Although “detestable at any other time,” the dehydrated and exhausted Argonauts found it a “delectable compound. We were quite as greedy for it as our animals and it worked a most remarkable change on our spirits—sighs, gloomy looks, groans and lamentations were changed to laughter, jokes, and thanks giving” (Durivage 1849:6-25).

The march from Pozo Hondo to Carrizo Creek remained the most difficult of the horrible passage. Dead mules surrounded the spring at Carrizo. The cane and grass “was extremely scarce and very young,” having been grazed to the point of obliteration by groups passing earlier in the year. Durivage’s party reached the water at 9:30 a.m. on June 26. Several had fallen behind on the trail and “suffered much from thirst, and water was carried back to them in order to get them in” (Durivage 1849:6-26).

There is little doubt that the summer of 1849 should have been a historic disaster on the Colorado Desert. The fact that there were no recorded human deaths among those who made the 90-mile crossing between the Colorado River and Carrizo Creek in May and June

is unfathomable given the conditions. As the summer heat continued to increase through July, August, and September there certainly would have been a dreadful human toll had not the environment changed radically west of Alamo Mocho.

The winter of 1848-1849 was exceptionally wet throughout the west (Couts 1849). Heavy winter snows in the Rocky Mountains caused an unusually high flood stage on the Colorado River that summer, causing it to overflow its banks on the delta. The excess water followed the course of the New River northward into present-day Imperial Valley. The desert, for more than 20 miles west of Alamo Mocho, was transformed into an oasis, with a running stream, lakes, and grassy pastures (Ellis 1995a:25).

This occurrence was not unknown. Colorado River overflow had occasionally run through these channels in the past, although the recent arrivals in the country from the United States had been unaware of it. When the Army of the West reached Alamo Mocho in 1846, captured Mexican horse traders claimed that they had previously found running water a few miles to the west (Emory 1848). Although it could not be relocated, the Mexicans had seen the flowing stream, indicating it had probably run within the previous year. Native American informants, interviewed in 1849, claimed that water had run in the New River channel for many years prior to 1829 (Ellis 1995a:25). Lt. Coutts noted that "The Indians about speak of it as an old thing, and are much astonished at our wonder" (Couts 1849).

In 1849, the phenomenon appears to have occurred on June 29. When the party of A. B. Clarke passed through, they left Alamo Mocho on the 28th, and reached El Pozo Hondo on the morning of the 29th, where they watered their livestock and continued toward Carrizo Creek, arriving at noon the following day. They did not encounter any streams or ponds of water between Alamo Mocho and Carrizo Creek. An anonymous diarist traveling behind Clarke's group left Cooke's Well on the morning of the 29th and arrived at Alamo Mocho in the afternoon. They left at 5 p.m. and journeyed 22 miles to "a large and beautiful lake of water, and encamped on the east side of it in a pleasant grove of mesquite trees." A small river flowed northward out of the lake. The next morning this group of emigrants followed the stream for 15 miles and then crossed at a point where they found it to be "about 30 feet wide" and swimming depth (Anonymous 1849 in Ellis 1995a:26). Others, who may have encountered the stream further to the northwest when it first appeared, found the original flow to be quite formidable. Major Heintzelman, in San Diego, recorded in his diary on July 18th that "Some men just in from the Gila" told "of a river which has sprung up in the middle of the desert. It is 150 yards wide and breast deep, with a rapid current. It had not yet reached the road when the first party saw it, but the next were detained four days and had to build a raft to cross" (White 1975). Word had first reached San Diego around July 4th. Claims from overland emigrants of a flowing river and a series of lakes where none had previously existed were, at first, met with skepticism, until later arrivals continued to confirm the reports (Emory letter of August 20, 1849 quoted in Ellis 1995a:25).

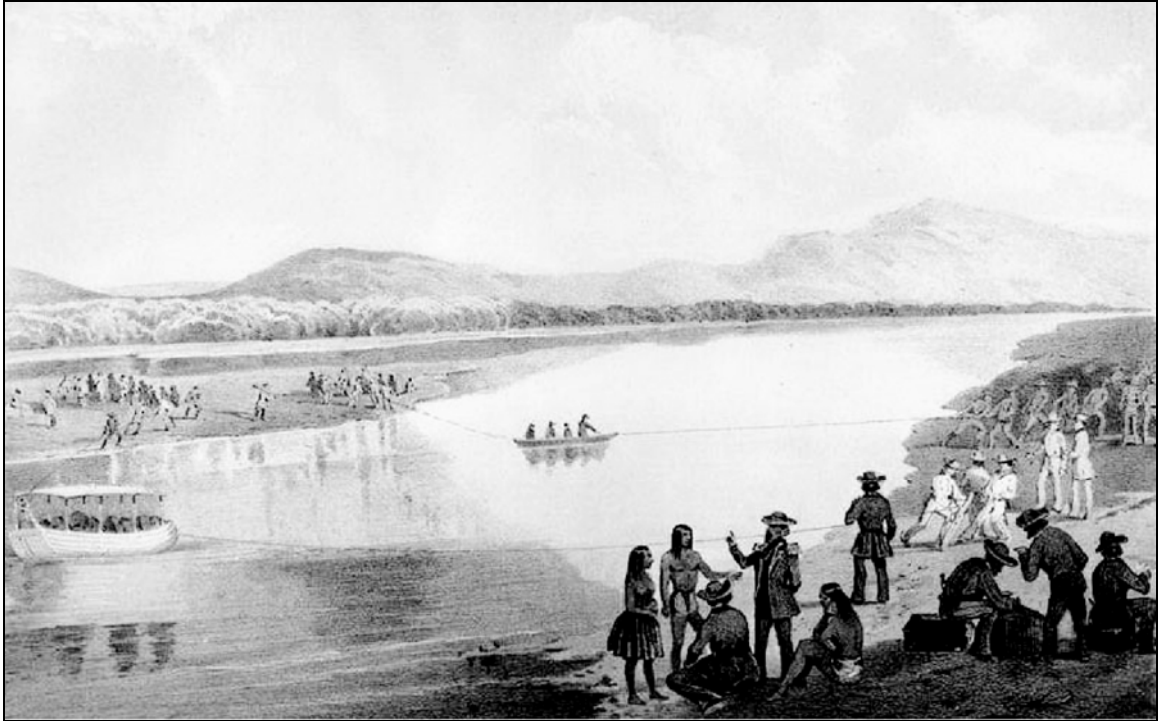
The New River provided both water and grazing. Fields of "buffalo grass" sprang up along its banks and around the edges of ponds, and lakes formed along its course. A variety of ducks and other migratory water fowl began to inhabit these wetlands (Couts 1849). Three main camping spots evolved (Marcy 1859). The first at Little Lake (Laguna), lay 16 miles beyond Alamo Mocho, where the Army established a station called Government Camp. Next came New River, four miles beyond. Here many groups stopped to rest and let their animals graze (Marcy 1859). The location became known as Emigrant Camp, which

Lieutenant Coutts named Camp Salvation when he first saw the place in September when escorting Lt. Whipple with the Boundary Commission (Coutts 1849:9-24; Aldrich 1849:11-17). Whipple recorded, "The grass here is good, and so abundant that we will be enabled to wait here for our remaining teams and recreate the weary animals. We are now in the midst of the desert and at the recruiting place for all travelers. The white tents of the numerous emigrants gave the place quite the air of a village. The grass upon the plain is short, green and tender. Upon the banks of the stream it grows tall and thick" (Whipple 1849:9-24). Another six miles beyond Emigrant Camp was Big Lake, a body of water about half a mile in length and a half-mile wide (Evans 1849:9-16). The "miraculous" oasis of the New River lasted for two years. On June 10, 1851, Major Heintzelman noted at Big Lake that "the water is drying up so rapidly at all these Lagunas, and I fear in a few months there will be none" (White 1975). On June 6, 1852 James Bartlett recorded that he had found the New River a dry "ravine or arroyo some twenty or thirty feet wide, and about ten feet below the surface of the desert" (Bartlett 1854).

In spite of the appearance of the New River, the trail west of the Colorado remained overwhelming for the majority of emigrants from the United States, and the most difficult part of the journey. Strangers to the desert, and unaware of the needs of sustained travel for several months over unsettled wilderness, the overland trek had taxed nearly all to the extreme by the time they reached the Colorado River. Arriving physically exhausted, with supplies used up and livestock worn out, few were adequately prepared to face the difficult terrain that still lay between them and Warner's Ranch (Figure 8).

By the late summer of 1849, a never-ending line of wagons, livestock, and pedestrians stretched westward from the Colorado River. On the 6th of September emigrant parties with over five hundred mules and horses camped at Vallecito "resting after the fatigues of the journey" (Evans 1849:9-6); an equal number could be found at San Felipe (Evans 1849:9-10). The large number of humans and livestock on the trail depleted all supplies of water, pasture, and food that the local environment could provide. William Chamberlain complained on August 15 at New River "Our entire stock of provisions is now reduced to about 3 days rations, and we have already felt the gnawing of hunger." The party with Benjamin Hayes, traveling between Carrizo and Vallecito in January 1850, contemplated "starving" for "a day, perhaps two," until they could get supplies (Hayes 1850:1-8).

In September 1849, the Boundary Commission survey party led by Lt. Amiel W. Whipple crossed from San Diego to the Colorado River to determine the exact point of the junction of the Colorado and Gila rivers. An escort of U.S. Army Dragoons under the command of Lt. Cave Coutts, who had crossed the previous year with Graham's battalion, accompanied Whipple's team. Upon their arrival at San Felipe, destitute emigrants besieged the company, saying that on the desert they would find "many in a condition bordering upon starvation" (Whipple 1849). They heard accounts of overland parties who had not yet reached the Colorado "without an animal of any kind, or morsel to eat." Coutts estimated that "one fourth of the thousands who are behind will come to the Colorado in distress." Before he could dismount "an old man by the name of Baker" accosted the Lieutenant for something to eat. He and his son had survived on nothing but coffee for three days. Coutts "gave them two days rations to get rid of them. In a few moments down came four more belonging to the same party. I gave them two days rations each" (Coutts 1849).



(a) "Rio Colorado near the Mojave Villages, from the left bank looking WNW," 1853-1855, U. S. Pacific Railroad Expedition and Surveys (reproduction courtesy of Melvin and Ellen Sweet).



(b) "Colorado Desert and Signal Mountain," 1853-1855, view to west, U.S. Pacific Railroad Expedition and Surveys (reproduction courtesy of Melvin and Ellen Sweet).

Figure 8. Rio Colorado, Colorado Desert, and Signal Mountain, 1853-1855.

Argonauts desperate for supplies continued to plague Coutts and Whipple all the way to the Colorado. Between San Felipe and Vallecito they encountered a “multitude of overland travelers all just gold sot.” Many had camped at El Puerto (Coutts 1849). At Vallecito the emigrants continued “flocking in.” One claimed that he and his brother were in “a terrible state, nearly starved to death, and without a morsel to eat.” The cook gave him four pounds of flour, “which he examined very closely,” and not thinking it good, “declined to accept it!” Others needed directions to Los Angeles and San Diego. Coutts complained “If I have made one I have made a hundred way-bills for them in the last three days. Left one stuck up on a board for their guidance” (Coutts 1849). Continuing their eastward journey that night the Whipple party found the road to Carrizo Creek “strewn with emigrants winding their way to the placers” (Whipple 1849).

At the New River throngs of needy travelers continued to overwhelm the party, badgering Lt. Coutts unceasingly:

The emigrants! Ah! “Still they come.” I never was in my life so annoyed. To sit and tell them of California, work on maps and way-bills for them, is only a pleasure. But then follows begging for sugar, flour, molasses, pork, a little fresh beef, rice, coffee, etc. and God only knows how they have the face to push such entreaties as they do. They have stopped on the route and kept me up at night listening to their stories of the Indian depredations on the Colorado, stealing their animals, etc., when they go up, and almost under my own eyes, steal my mules! [Coutts 1849]

The strain of the crossing forced many to discard all they had brought with them in order to lighten their loads. As animals failed and collapsed, entire wagons had to be abandoned. The trail became littered with refuse and dead animal remains. Between Alamo Mocho and El Pozo Hondo, Durivage encountered “two abandoned wagons; and literally covering the ground were dead mules, fragments of harness, gun barrels, trunks, wearing apparel, barrels, casks, saws, bottles, and quantities of articles too numerous to mention” (Durivage 1849:6-24). Crossing in June, A. B. Clarke noted “We saw more than a dozen dead animals with their trappings on the road today. When anyone saw a saddle better than his own, he made an exchange” (Clarke 1849). The Evans party crossing west of Cooke’s Well on September 4 encountered the bones of horses and cattle along the road, “and we not infrequently find saddles, harness, and wagons left by their owners.” The following day at Alamo Mocho they found the ground “covered with the remnants of property, and it is a perfect bone yard; everything but provisions and firearms can be picked up” (Evans 1849). A month later William Chamberlain found the same spot to be “a perfect Golgotha—the bones of thousands of animals lie strewn about in every direction; and a great number of carcasses of horses and mules that have died lately, pollute the atmosphere. Deserted wagons, harnesses, saddles, etc. add to this destructive and sickening scene” (Chamberlain 1849:8-14). As the months continued, thousands of dollars in abandoned equipment accumulated in the desert. By 1852 it was estimated that “more than a hundred good wagons, with harness, pack saddles, and a vast quantity of camp equipage, were scattered along the road.” During the cooler months parties from the coast drove fresh teams into the desert and salvaged many of the abandoned vehicles and accoutrements (Bartlett 1854, entry for 6-6-1852).

The 28 miles between New River and Carrizo Creek remained the hardest part of the trail, in spite of the respite provided by the New River oasis. The constant traffic had

churned up the already soft sand so that animals and wagons sank and could not gain a firm footing. This section became even more littered with dead animals than previous portions of the trail. At “every turn of the road” the 49ers found “the decayed and decaying remains of some horse or mule” (Evans 1849).

The great influx of abandoned livestock onto the desert provided a previously unknown source of food, in what seemed to be never ending quantities, for Native Americans. Benjamin Hayes saw an encampment at Big Lake in January 1850:

There were a good many of them altogether at this place—we could see their smoke among the mesquite from our camp. They call themselves San Diego’s. They seem to prowl about here, depending in a measure for subsistence on mules, oxen, &c., which give out on the road. They get the seeds of a large weed, which grows abundantly here, grind it & soft it, and make bread of it [amaranth]. There was a horse just killed and cut up at their camp. In the hollow at our camp at Camp Salvation we found some of them cutting up a mule which had mired. [Hayes 1850]

It is ironic that the Argonauts who so desperately needed food would not eat horse and mule meat, so plentifully available around them. They preferred to contemplate “starving ... for a day or two” rather than take advantage of an obvious source of protein that could relieve their dilemma.

Scavenging animals also feasted. Coyotes had always been present on the desert. They became abundant in 1849, and grew fat feeding on livestock remains. Turkey vultures also invaded the region and large flocks became a permanent feature for many years thereafter. A biologist with the Railroad Survey in 1853 reported that, although the turkey vulture ranged over the entire state, the birds could be found “in great numbers in the vicinity of Fort Yuma ... and more especially on the desert between the Colorado and Carrisa Creek” where they found an ample food supply from the numerous carcasses of animals that perished from fatigue or the want of water and grass and “whose whitened bones, strewn over the ground, mark both the road and the hardship of the western pioneer.” The birds seemed “to be on terms of amity with both the raven and California vulture whilst feeding, but upon the approach of the coyote or prairie wolf they all retire to a respectful distance until he has gorged himself on the dainty fare” (Hermann 1853).

While many emigrants suffered, some were able to cross the desert with little or no problems. Lewis B. Harris noted that by “taking a little trouble” to procure food for their animals and water containers for men and livestock, his party crossed the desert “without ever feeling the want for food” and after a short rest at Camp Salvation his animals were as good as ever (Harris 10-21-1849, quoted in Ellis 1995b:26, note 33).

Large numbers of Mexicans continued to travel the road without experiencing extreme hardship. Most Argonaut diaries and government reports mention Mexicans on the road traveling in both directions (Ellis 1995b). They are almost never described in distress. As already noted when the Graham battalion marched to San Diego in the winter of 1848-1849 they encountered hundreds of Sonorans heading for the gold fields. A few months later John C. Fremont arrived at the Colorado River and encountered a large group of men, women, and children from Sonora (Ellis 1995b:35, note 13). While camping at the New River in August 1849, William Chamberlain encountered “a company of Sonorans ... on their way home from the gold mines of California. We could talk but little Mexican, but

learned from them that there were a great many Americans in the mines; that mules were worth from \$100 to \$300, etc. They showed us a quantity of gold dust, and said it was very abundant out in the diggings” (Chamberlain 1849). As they journeyed northward they continued to meet “great numbers of returning Sonorans” (Chamberlain 1849). The Evans Party following a few weeks behind had similar experiences. At Alamo Mocho on September 5 “we met another troop of Mexicans returning from the gold region, having with them a large quantity of the gold. These men return with the intention of removing their families to the valley of the San Joacin (sic.) River and express themselves well pleased with the Americans at the mines” (Evans 1849). In the early 1850s Sonorans and natives of New Mexico began returning with herds of livestock. With the great increase in population, cattle and sheep now commanded top market prices in California (White 1975).<sup>8</sup>

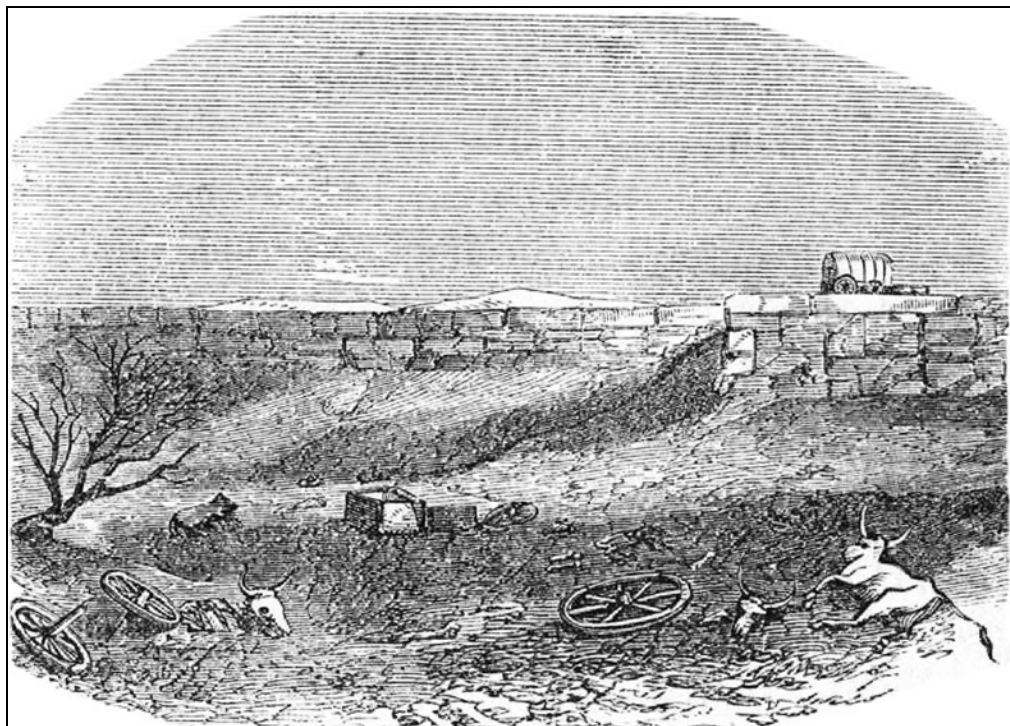
Beginning in the fall of 1849, the Army began to actively aid overland travelers. This was provided, most importantly, through the distribution of food rations, although wells and sections of the road were improved. After the Whipple expedition reached the Colorado, Lt. Coats wrote to Colonel Emory in San Diego describing the need for aid to emigrants (Tamplin 1979:50). Emory organized relief trains and sent rations from existing military supplies to Camp Calhoun at the Colorado and Camp Salvation. On November 27, 1849, H.M.T. Powell met “a government train of mules with 3,000 rations, between Camp Salvation and Carrizo Creek (Ellis note 25 in Powell 1849). In December, D. D. Demarest procured three days’ rations at Camp Salvation (Demarest 1849). Two months later, in January 1850, Benjamin Hayes procured relief stores from officers of the Mexican Boundary Commission at Vallecito. He then met a government pack train at Vallecito with supplies to be distributed between San Felipe and Camp Salvation (Hayes 1850). In August of that year the Army established a “sub-depot” at Vallecito to aid in the supplying of Fort Yuma, which had been established that summer. This outpost operated intermittently until June 1853 (White 1975, entry of 8-19-1850; Tamplin 1979:54). Establishment of Fort Yuma also brought road improvements. The Army now needed to dispatch supply trains on a regular basis. Difficult passages and unreliable water holes could not be tolerated. Major Heintzelman, commander at the fort, dispatched work details to improve existing wells, establish additional water places, and work on the road (White 1975, entry of 11-4-1850).<sup>9</sup> Additional aid was available for those who made it across the desert at Warner’s Ranch (Figure 9a).

The San José Valley, by this time more commonly known as “Warner’s” or “Warner’s Ranch,” was the first camping spot with unlimited pasture that the emigrants finally reached after weeks of crossing cactus- and creosote-covered desert sands. Both livestock and travelers needed rest and refurbishment. Many camped in the southern portion of the valley to let their animals graze and regain strength while they attempted to restock badly depleted supplies. Warner’s foreman, William Marshall, ran a store at the Agua Caliente Native American village. In order to better compete against Marshall and maximize the commercial opportunity the emigrants needs represented, Warner established a trading post on the main overland trail. He located his home and store in the southern part of the valley, near the western end of Cañada Buena Vista, precisely at the point where the San Diego road branched off from the main route (Wright 1961; Coats 1856; Hayes 1850; Aldrich 1851; Warner 1886:15-17). The trading post carried flour, liquor, arms and ammunition, and other supplies. Warner brought cattle from the Santa Margarita Rancho of his wife’s stepbrother Pio Pico, near present day Oceanside, in order to provide fresh beef (Aldrich 1851; Hayes 1850).<sup>10</sup>





(a) "Warner's Pass from San Felipe," 1853-1855, U.S. Pacific Railroad Expedition and Surveys  
(reproduction courtesy of Melvin and Ellen Sweet).



(b) "Well in the Desert – Alamo Mocho," 1853-1855, Lt. Robert S. Williamson  
(reproduction courtesy of San Diego Historical Society Archives).

Figure 9. Warners Pass and Well in the Desert, 1853-1855.

In January 1850, Benjamin Hayes arrived at Warner's, recording over a period of several days what is probably the most detailed account of the valley and trading post made by any Gold Rush emigrant. On January 13 he noted that other 49ers camped in the valley "have obtained good beef and salt—nothing else to be had they say. Some have been over to the Native American rancheria Agua Caliente getting flour at \$2.00 per almud from the store kept there [the trading post at the hot springs run by Marshall]. Warner's beef is disappearing by wholesale." The following day he went to the trading post at the fork in the road and saw Warner "A tall man—dressed a' la California—short blue jacket, trousers broad at the bottom of the legs—half Californian, half sailor I thought." When they entered, Jonathan Warner was seated at breakfast, "which probably had put him in his best humor. Quite talkative: said he would let us have milk tomorrow morning; and at some inconvenience to himself, sugar and salt. He examined Major Shepherd's gun and offered to mend it. His reception was very courteous: we formed a favorable impression of him." Warner commented that he had no more cattle "fit to be slaughtered" and could not go himself to Santa Margarita, for cattle as his "whites" were not yet "Californized" enough for California labor. He offered "to guarantee any man \$100 per thousand, who will stop and cut lumber! His house is upon one of the beautiful, high rolling hills, without other vegetation than bunch grass.... It is precisely at the point where the old main road branches, one fork to the town of San Diego, the other to Los Angeles—convenient for the supply of emigrants." Warner said that he would find something to trade with the emigrants as fast as they arrived. "None shall starve. Several sold their pistols to him for food, some of whom started with plenty of money." On January 17 Hayes and his companions dined with Warner, eating soup, corn-beef, pumpkins, coffee with milk and dried grapes. Two days later, on the 19th, both Marshall and Warner purchased some emigrant wagons. As a comment on the variety of items the desperate Argonauts traded for supplies, Hayes noted "In fact Warner's house is a perfect bazaar of emigration—almost every species of mechanics tools—and an armory in the way of everything except 24 pounders" (Hayes 1850 quoted in Hill 1927:120-129).<sup>11</sup> The trading posts in the San José Valley came to an abrupt and sudden end in November 1851, when Native Americans attacked and burned Warner's house and store during an uprising. William Marshall was accused of aiding in and instigating the attack and executed. Warner never returned to live in the valley.

Within a few years, travel on the trail became somewhat less insecure. When another expedition of the Boundary Commission under James Bartlett journeyed to the Colorado River in 1852, they found conditions to be more reliable than they had been two years earlier. Ironically, the vast wave of 49ers had passed, although there was still substantial traffic on the road, especially government pack trains (Bartlett 1854, entry of 6-3-1852).

In addition to the sub-depot at Vallecito, the party found a watering place at Sackett's Well, 15 miles south of Carrizo Creek, which had been established by the Army in 1850 (Cronise 1868:96).<sup>12</sup> When the Overland Railroad survey teams passed through between 1853 and 1855 additional improvements had been made. A water hole had been established at Indian Wells, 14.5 miles south of Sackett's near the former location of Camp Salvation (Poole 1855:23). This seems to have replaced the former unreliable water source at El Pozo Hondo. The other crude wells in the desert had also been improved by this time. At Alamo Mocho the well "was about 18 feet deep, and lined with boards, and protected by a low curb" (Blake 1857:109-110; see Figure 9b). In spite of these improvements the crossing still remained difficult. In June 1852, Bartlett found abandoned government supply

wagons between Alamo Mocho and Cooke's Wells (Bartlett 1854, entry of 6-7-1852). William Blake with the Railroad Survey noted that the air between Vallecito and Carrizo Creek was loaded with the effluvia rising from the numerous carcasses of cattle and sheep in an advanced state of decomposition (Blake 1857:105).

### **Descriptions of Carrizo Creek**

Throughout this period, the springs and marsh at Carrizo Creek remained important as a reliable source of running water after what was consistently described as the hardest stretch of the trail. In spite of the appearance of the New River and its associated lakes, the emigrants still suffered from lack of water and extreme fatigue while crossing the sandy stretches before reaching Carrizo Creek. The truth is that by the time they reached the Colorado River, most were so exhausted and debilitated after their long journey that, as they continued westward, what may have been a monotonous march under normal circumstances became a taxing test of endurance. More livestock collapsed along this stretch of the trail than any other. Clarke recorded on June 30, 1849:

We arrived at Carrizo (Cane) Creek at noon; this is the first running water on this side of the desert. The whole distance we have passed carcasses of mules and horses, particularly at the end of the route; I should judge at least 30 or 40 a day.... The creek can be stepped over in many places and disappears in the sand a mile below. The last part of the journey on the desert is the most forlorn that can be imagined, consisting of immense sand-hills, worn into various singular shapes, outskirting the desert with mica, and layers of gypsum. As there is no grass here, we went on hoping to find some. [Clarke 1849]

A month later, the John S. Robb party had an equally difficult time, in spite of the presence of the New River. Having run out of water, and suffering from thirst, they rested a few hours and then tried to continue "but fainting with the hot air, hot sand, and want of water, we again lay down and in almost despair slept until night..." At sundown they continued, listening to the howls from a pack of coyotes. Then, suddenly, a joyful sound penetrated the desert air:

I heard the croaking of frogs! Their voices like the sweetest music to our ears, and lent vigor to our famishing bodies. We knew we were reaching the creek—presently we came in sight of the stream rippling along in the clear moonlight, and the mules and ourselves ran a race for the grateful beverage, and bent ourselves together in its flood. It took many draughts to satisfy our thirst, but we finally found it possible to get enough water. We had been fifteen hours beneath the burning sun without water, and forty two without food. [quoted in Ellis 1995b]

The Chamberlain party's experience was similar:

When the moon rose, about 4 o'clock in the morning, we packed up and started in a N. W. direction. About 9 o'clock a.m. we entered the mountains. Armstrong abandoned his riding horse this morning, and more of our stock show strong symptoms of "giving out." Our canteens are empty and we are obliged to push for water. After a hard struggle we reached Cariso creek, but found no water. The sight of the dry bed of a stream would not allay our thirst, and we made all haste up it until we reached the head, where a small

rivulet is formed by the water oozing out of the ground in several places, flowing a short distance, and then disappearing in the sand. In our eagerness to reach water, it was the best man, or rather, the best animal foremost. We were scattered all along the way, and the last of the company did not get up for two hours after the first. We reached this point at 11 a.m. The water, though clear as crystal, has a peculiar and unpleasant taste. We ate a piece, but we could find nothing for our animals to feed upon. [Chamberlain 1849]

Here again the Chamberlain party encountered “a large number of Sonorans ... resting their stock, before they undertake crossing the desert. This appears to be a general encamping place, but the stench arising from the number of dead animals strewn about is almost sickening” (Chamberlain 1849).

A few weeks later, as the Whipple expedition arrived at Carrizo, Cave Coutts was astonished “at not finding a particle of cane for the poor animals and more still at their not drinking the water. The little stream is running rather brisk, but not a horse or mule would put their nose to it. The water is the same as when we passed on 2nd of December last but I judge that the number of dead animals around and in the water, was the reason they would not use it” (Coutts 1856).

In November H.M.T. Powell found the creek to be a “mere thread,” three to nine inches wide. In contrast to when Coutts had passed, there was “cane and grass in plenty” (Powell 1849:11-27) probably as a result of winter rains (Ellis 1995b, note 119).

Benjamin Hayes reached the stream soon after sunrise on the 8th of January, 1850. He breakfasted on “a flapjack” with a party from Texas already camped there. “The boys have concluded to stop 2 or 3 hours. They are cooking beans...” The stream was “flowing over a broad sandy bed, but at present with a rapid current, though not more than a foot wide. We threw up the sand, which made convenient pools, soon becoming clear” (Hayes 1850).

Arriving in June 1852 in route to Fort Yuma, James Bartlett left the most detailed description of the creek during this period:

June 4th. Carrizo Creek is one of those remarkable streams which sometimes spring up in desert regions. It rises in the very center of barrenness, flows for about a mile, and is again absorbed by the desert. It has worn for itself a bed about fifteen feet below the plain. It is from three to nine inches in depth, and varies from six feet to as many yards in width. Where the banks have been washed away, it receives, in several places, accessions from springs; but when these cease, the stream grows less and less, until it is all absorbed by the sands. In the ravine or bed formed by this water, mesquite bushes grow to the height of ten or twelve feet, the deep green of their foliage presenting a pleasing contrast with the desolation around, and marking the course of the stream from its beginning to its end. The grass, which grows in a few patches, in little nooks, which receive their moisture from the creek, is very coarse and wiry; and of this there is not enough to supply the few passing trains that come this way. The heat here to-day was insupportable, the mercury ranging at 114° in the shade. The rays of the sun beat through our tents, so that we could not remain in them. Some retreated beneath the wagons; while myself and others found our way into little gullies or ravines

beneath the clay banks, where, partly sheltered by the banks and partly by bushes, we passed the day.

We had much trouble here with our mules, who did not like the coarse grass before them; so that while the herders thought that they were quietly trying to pick up a living on the margin of the stream, they were off at full speed for Vallecita, where they had recollection of better fare. Some were arrested in their flight within a few miles of camp, while others were not overtaken until they had reached the grassy patches they were in search of. This is a common habit with mules, and often impedes the progress of a train. I have known them, where the grass was poor, to retrace their steps twenty-five miles for the sake of finding better. Experience showed us that in such places as this the animals must be closely watched, and at night tied up to the wagons. We noticed a peculiarity in the water here, which was that, although sweet, it did not quench the thirst. We all drank incessantly without being satisfied. As we entered the great desert here, and expected to find no water, except by digging, until we reached the Colorado, one hundred miles distant, we filled all our kegs, canteens, empty bottles, and everything else that would hold water. I then directed the wagons to be loaded, the mules packed, and the train to move at sunset.

I have forgotten to mention that we saw along the banks of Carrizo Creek, near our camp, an innumerable quantity of the bones and dried carcasses of sheep, a rare occurrence in a region infested by hungry wolves; but numerous and hungry as the wolves are, there is such a thing as satiating their appetites, and of this we had an example before our eyes. Here were the bodies of many thousands of sheep lying in piles within the space of a hundred yards. This wholesale mortality is said to have been caused by their eating of a poisonous plant; but as we could find no specimens of such a plant, we believed that the poor creatures, after traversing the desert and being probably three or four days without water, had drunk themselves to death. Most of the bodies were in the immediate vicinity of the stream.  
[Bartlett 1854]

A few years later, the Army appears to have established a station at Carrizo Creek. On June 3, 1855, Thomas Antisell, geologist with the Pacific Railroad Survey reported “the storekeeper inhabiting the adobe house, newly built at camp, informed us that; for the eight months previous to our visit, it had not rained but once, and then for eight hours heavily...” The temperature reached 100 degrees Fahrenheit at noon and reached 102 later in the day. “The effect of this heat was visible on the stream, which ceased to flow around 11 o’clock, and did not recommence until 4 p.m.” (Antisell 1856:121). This newly-built adobe house soon became more than just an isolated desert post. In a little over two years it would become an important station on the first overland transcontinental mail service to link the east and west coast.

## THE OVERLAND MAIL

Mail had been carried overland to California since 1847 by military couriers. Prior to 1854, this occurred periodically according to the Army's needs and its consequent dispatches. There was no regular service. Joseph Swycaffer and Sam Warnock ran the first mail service between San Diego and Fort Yuma from 1854 to 1857. They used mules and followed the trail from Green Valley in the Cuyamaca Mountains down the old Indian and Fages trail in Oriflamme Canyon, intersecting the emigrant road between El Puerto and present-day Box Canyon (Lake 1957; Rensch 1957a, 1957b; Swycaffer 1938).

From 1857 to 1861, the Gila trail was used by the overland mail service. First carried by the San Antonio and San Diego Mail Line, from July 1857 through August 1858, and then the Butterfield Overland Mail Company, from September 1858 through June 1861, establishment of the Overland Mail constituted the first regular communication and transportation service across the continental United States, 12 years before completion of the transcontinental railroad. In the mid-1850s, creation of a transcontinental overland mail service became a priority of Congress. With such a large population now residing in California as a result of the Gold Rush, the long delays of several months to send mail by sea routes was unacceptable. During 1856, four overland mail bills were submitted and on August 18, Congress passed an amendment to the Post Office bill, authorizing establishment of an overland mail route between the Mississippi River and San Francisco. It also authorized the Postmaster General to immediately initiate an interim service to provide adequate mail connections between East and West until the route between the Mississippi and San Francisco could be established. James Birch, a successful California stage line entrepreneur, received a contract for the interim service and established the San Antonio and San Diego Mail Line. He was to run stages twice monthly on a 30-day schedule between these two small frontier outposts for \$150,000 a year. From San Francisco, the traveler could proceed by steamer to San Diego, by stage to San Antonio, then by various means to New Orleans and the Atlantic Coast. There were also connections from El Paso or Fort Filmore, farther up the Rio Grande, with stagecoach lines to Independence, Missouri, by way of Santa Fe (Banning and Banning 1929, 1930; Johnson 1938). The first eastbound mail left San Diego on August 9, 1857, and followed the wagon road via Santa Ysabel, Warner's Ranch and San Felipe. The first west-bound mail, which left San Antonio on July 9, followed the same route across the mountains and arrived in San Diego on August 31 after a trip of 52 days (Johnson 1938; Pourade 1963:220-225).<sup>13</sup>

### The San Antonio and San Diego Mail

Establishment of the Birch line was nothing less than remarkable. Only 27 days elapsed from the date he received the contract, on June 12, 1857, and the 9th of July when the first mule train carrying mail left San Antonio. Superintendent Isaiah C. Woods, in charge of laying out the line, set it up as the mule trains and coaches journeyed west across 1,450 miles of arid wilderness. Woods took charge on June 15, dispatching agents to San Antonio and San Diego to procure mules, employees, and supplies, and dispatch the first mails. The second westward-bound mail left San Antonio at 6 a.m. on July 24. Woods had prepared the self-contained "outfit" for a journey across unsettled country with almost no existing infrastructure. It included one coach and harness, six men—each well-armed with rifles and a Colt's pistol, four saddles and accoutrements, ropes, hobbles, shoeing tools,

shoes and nails, cooking utensils, numerous minor articles, 19 mules, provisions for 30 days, and six hundred dollars in cash to purchase supplies. An additional 27 mules and a coach had already been sent out to provide relays along the road. This party was subsequently attacked by Native Americans who killed one of the passengers, damaged the coach, and stole the livestock (Woods 1858:6). The third westward-bound mail left San Antonio on July 31. This train included three coaches and harnesses, 17 men armed with rifles and Colt's pistols, 38 mules, four thousand pounds of rations, ten saddles, and "the smaller articles usually sent." Woods left the next day to overtake and travel with this train to San Diego, setting up the line as he went (Woods 1858:3-4).

The party proceeded westward, camping out, fording flooded rivers, repairing coaches and wagons, procuring additional mules and vehicles, and avoiding hostile Native Americans. On the morning of August 3rd Isaiah recorded:

We cooked our breakfast this morning under the trees just outside of the tower of Uvalde. We have tin plates, tin cups, knives and forks, iron spoons, a gunny bag as a table cloth, and one seat in the shape of a water keg among eight of us. [Woods 1858:9]

On August 4th he continued:

In carrying the mail we do not drive all the time from our morning start to the night camp. We stop four times during the day; twice for our two meals of breakfast and dinner; breakfast after the morning drive, dinner about 4 o'clock. We also stop once for a nooning, and once about sunset to graze the mules, at which hour they seem to feed best. We stopped half an hour to-day at Camp Hudson, situated at the second crossing of the San Pedro, or the Devil's river; here I found the remnant of our coach, with the pole and ten spokes broken, the bars gone, the top all stripped, a bullet hole through the body from a gun, carbine, or some piece carrying a heavy ball, and fired by the Indians. [Woods 1858:9]

Five days later on August 9th, R. E. Doyle, the company's agent in San Diego, dispatched the first eastward-bound mail. Mule relays had already been sent ahead to Fort Yuma (Pourade 1963:220-225; Johnson 1938:56; *San Diego Herald* 8-15-1857).

By September 4<sup>th</sup>, Woods had reached the Colorado. They crossed the river shortly after sunrise of the fifth on "an excellent ferry, and continued across the desert, arriving at Indian Wells at sunset the following day." The wells had no water, "an encampment of Yuma Indians had used it nearly up." After eating, they continued to Carrizo Creek, arriving at dawn the next morning, September 7. In contrast to the agony most 49ers had experienced on this section, Woods commented "This portion of the road is by no means a bad one" (Woods 1858:21).

At this point the mules were exhausted. Most of the herd had made the journey from Tucson in less than eight days. They had not slept during the 48 hour crossing from Yuma, and had gone 24 hours without water. Upon reaching Carrizo, they "filled themselves at once with the medicated waters of the creek and thus destroyed their appetites, so that they would never eat a proper quantity of hay or grain." In order to get the mail over the mountains and into San Diego as quickly as possible, Woods selected nine of the best animals and pushed ahead, with one other companion, taking the Oriflamme Canyon cutoff to Lassitor's ranch at Green Valley in the Cuyamacas.<sup>14</sup> The rest of the group followed at a

slower pace along the emigrant Wagon Road to Warner's and then took the cutoff to San Diego via Santa Ysabel. Woods' mule train reached San Diego at 10 p.m. on the night of September 8, "after a toilsome day's journey down the mountains." He had been on the trail for 38 days (Woods 1858:22; Rensch 1957a, 1957b).

Woods spent the next five weeks preparing the western end of the line, dispatching men, vehicles, and supplies to newly-established stations. On October 6<sup>th</sup>, a steamer arrived from San Francisco with supplies. On the 24<sup>th</sup>, a coach and wagon loaded with rations left for Maricopa Wells. A corral for livestock was established at Lassitor's ranch, where Woods also contracted to have hay and straw delivered to stations at Vallecito and Carrizo Creek. On October 17<sup>th</sup>, two coaches with "complete outfits" of animals and other necessities were sent over the mountains: "one is to run between Carissa Creek and Fort Yuma; the other . . . between Fort Yuma and Maricopa Wells." Two more coaches, and a pack train of fourteen animals "heavily laden with every description of supplies for the line" were sent to Carrizo Creek on October 22. Woods left two days later on mule back, with Mr. Doyle and a through passenger, taking the "shorter mountain trail" to Lassitor's where they spent a day branding a "mulada" of 75 animals." They reached Carrizo Creek with most of the herd the afternoon of October 27, where they found the party with the coaches that had come via the wagon road through Santa Ysabel and Warner's Ranch. The west-bound train now included 12 men, 3 coaches, 72 animals, "and everything necessary for staging purposes." They left Carrizo Creek Station on October 28th and proceeded eastward to supply the line (Woods 1858:23-24; Rensch 1957a).

The station at Carrizo Creek became an important link in the San Antonio—San Diego Mail line. It functioned as one of seven major stations west of the Rio Grande. Here passengers disembarked to change coaches. At Carrizo Creek they left the east-bound stage from San Diego and boarded another that ran between Carrizo and Fort Yuma (Woods 1858:23-24, 26-27). It is assumed that this stage remained at the station until the other returned with west-bound passengers that had boarded in Yuma. Watering stations were established at an average of 30 mile intervals (*Sacramento Union* 8-12-1857).

Woods reported that by November 27<sup>th</sup>:

The mail line had now nearly or quite two hundred head of mules west of the Rio Grande, stationed at San Diego, Carissa Creek, Fort Yuma, Petermans, Maricopa Wells, Tucson, and La Mesilla. At each of these places agencies or stations had been established with abundant supplies of grain everywhere. We feed corn to all our working mules. I had made contracts for hay wherever the grass was likely to be short the coming winter. We had thirty-five mail carriers and agents along this part of the line; well armed border men, carefully chosen for familiarity with this kind of service. We had seven coaches on the road, and three more building in San Diego, so that we could already take passengers through from ocean to ocean in stage coaches. [Woods 1858]

He also noted that "Our watering places in the desert west of Fort Yuma are by no means far apart, but the supply is limited at all times. It will be a matter of absolute necessity to enlarge them before the overland emigration of this spring reaches the desert. The improvement of those now used as well and the digging of others, will be easily accomplished" (Woods 1858:33).



Residents at the frontier pueblo of San Diego became extremely excited over the development of overland mail service from San Antonio. They felt it would assure the community's growth into a major urban transportation center. The local newspaper, the *San Diego Herald*, followed events closely and reported on Birch's reception of the contract on July 25, commenting that the event was more important to the region than passage of the transcontinental railroad bill. It insured the future coast-to-coast rail link would follow the southern route with San Diego as its western terminus (*San Diego Herald* 7-25-1857).

When the first mails arrived at noon on August 31st, celebration engulfed the town that included firing of fire crackers, a 100 anvil salute, "and the general congratulations of the citizens." The *San Diego Herald* proclaimed it "the most important event which has ever occurred in the annals of San Diego, and undoubtedly constitutes an epoch in the Pacific Coast of the Union, which will be recorded and remembered with just pride, long after the mails will have been transported on the great continental railroad, the first rail of which may be thus said to have been laid" (*San Diego Herald* 9-5-1857).

The mail dispatched from San Antonio on the 24th had overtaken the first mule train, which had left on the 9th, so that both arrived in San Diego on August 31st. It took 52 days for the first and 38 days for the second mail to complete the journey. Although not at the overwhelming numbers of 1848 through 1851, there were still many emigrants on the trail. The mail riders had passed "upwards of one hundred wagons, ... with considerable quantities of stock" (*San Diego Herald* 9-5-1857).

As Isaiah Woods continued to establish stations along the route, the carriers began to set new records for completing the journey. The third and fourth mails reached San Diego in just 30 days, arriving on September 8th and 23rd respectively. The fourth mail made the crossing from Fort Yuma to San Diego in two days and 14 hours, "the quickest time on record" (*San Diego Herald* 9-12-1857, 9-26-1857). The next trip proceeded even faster and arrived on October 5th, completing the 1,450 mile journey in 26 days and 12 hours. The pueblo once again celebrated with an anvil salute. These riders made the trip from Fort Yuma to San Diego in exactly two days, crossing the desert between the Colorado and Warner's in 29 hours. The *Herald* declared "The bugbear of the desert is knocked sky high" (*San Diego Herald* 10-5-1857). Throughout the rest of 1857 and the winter and spring of 1858, trips of less than 30 days became common. Then in May 1858, the mail carriers set a new record of 23 days, followed by a completed journey of 22 and a half days in early June. San Diego once again celebrated and 100 guns were fired in the plaza (*San Diego Herald* 5-22-1858, 6-5-1858). When compared to the hardships experienced by overland travelers on this same terrain just five years before, the record of the San Antonio to San Diego line was extraordinary.

By November 1857, overland mail departures had become routine (Figure 10a). On the arrival of each steamer from San Francisco a coach was dispatched with six through passengers (*San Diego Herald* 11-21-1857). The mail company used two routes to get to the desert. "Light covered coaches" followed the traditional wagon road through San Pasqual, Santa Ysabel, and Warner's Ranch (*Sacramento Union* 1-11-1858; Johnson 1938:64) (Figure 10a). Some passengers traveled in vehicles to Lassitor's ranch, then traveled 18 miles down Oriflamme Canyon to Vallecito on mule-back. The price of passage was \$35 to Fort Yuma, \$75 to Tucson, \$120 to El Paso, and \$150 to San Antonio (*San Diego Herald* 11-21-1857). On January 9, 1858, the *San Diego Herald* praised the line: "The overland

## OVERLAND TO THE PACIFIC.



### The San Antonio and San Diego Mail-Line.

This Line, which has been in successful operation since July 1857, is ticketing PASSENGERS through to San Diego and San Francisco, and also to all intermediate stations. Passengers and Express matter forwarded in *new coaches*, drawn by six mules, over the entire length of our Line, excepting the Colorado Desert of one hundred miles, which we cross on mule-back. Passengers GUARANTEED in their tickets to ride in Coaches, excepting the one hundred miles above stated.

Passengers ticketed through, from NEW-ORLEANS, to the following points, via SAN ANTONIO:

To Fort Clark,.....	Fare, \$52.	To Fort Bliss.....	Fare, \$100.
" Hudson,.....	" 60.	" La Mesilla,.....	" 105.
" Fort Lancaster, ..	" 70.	" Fort Willmore.....	" 105.
" Davis,.....	" 90.	" Tucson.....	" 135.
" Quitman,.....	" 100.	" Fort Yuma,.....	" 162.
" Birchville,.....	" 100.	" San Diego,.....	" 190.
" San Elizario,....	" 100.	" Los Angeles,.....	" 190.
" El Paso,.....	" 100.	" San Francisco,....	" 200.

The Coaches of our Line leave semi-monthly from each end, on the 9th and 24th of each month, at 6 o'clock A.M.

An armed escort travels through the Indian country with each mail train, for the protection of the mails and passengers.

Passengers are provided with provisions during the trip, except where the Coach stops at Public Houses along the Line, at which each Passenger will pay for his own meal.

Each Passenger is allowed thirty pounds of personal baggage, exclusive of blankets and arms.

Passengers coming to San Antonio can take the line of mail-steamers from New-Orleans five times a week to Indianola. From the latter place there is a daily line of four-horse mail-coaches direct to this place.

On the Pacific side, the California Steam Navigation Company are running a first-class steamer, semi-monthly, to and from San Francisco and San Diego.

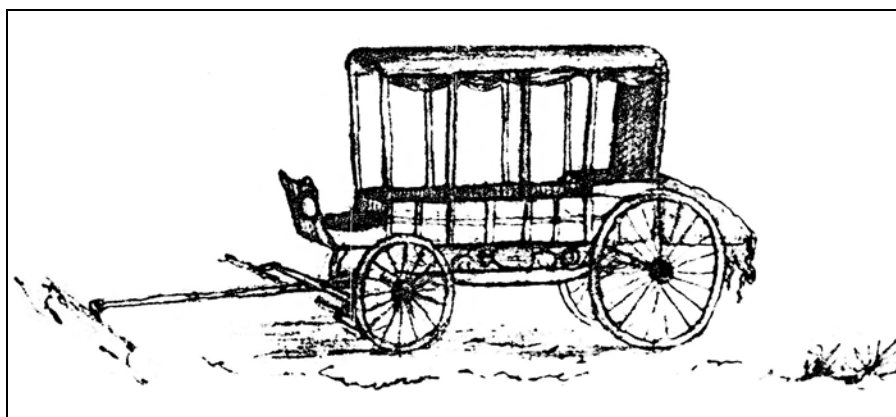
Extra Baggage, when carried, 40 cents per pound to El Paso, and \$1 per pound to San Diego.

Passengers can obtain all necessary outfits in San Antonio.

For further information, and for the purchase of tickets, apply at the office of C. G. WAYNE, 61 Camp Street, New-Orleans, or at the Company's Office, in San Antonio.

G. H. GIDDINGS, } Proprietors.  
R. E. DOYLE. }

(a) San Antonio and San Diego Mail-Line billboard, 1860  
(the Dr. Louis Strahlman Collection, courtesy of the San Diego Historical Society Archives).



(b) "Our Ambulance from Rio Grande to Tucson," 1858 (original drawing by Phocion Way, reproduction courtesy of the Journal of the Southwest, University of Arizona).

Figure 10. Billboard, 1860, and Coach, 1858.

mail from San Antonio arrived on the 8th inst., in 29 days. Considering the length of the route, the longest uninterrupted line in the U. States, if not in the world, it is worthy of remark that the contractors have never failed to make their schedule time since the second mail run. They have lost animals, wagons, and men, fought Indians, and conquered the desert, but they always bring their mails along inside of time. This shows the right kind of energy” (*San Diego Herald* 1-9-1858).

James Birch never saw the success of his pioneer overland mail. He was lost at sea on September 12th, 1857. The business continued to operate under the partnership of George H. Giddings of San Antonio, Texas, and R. E. Doyle of San Diego. Giddings was Superintendent of the eastern division and Doyle of the western division at the time of Birch’s death (Johnson 1938:20-24).

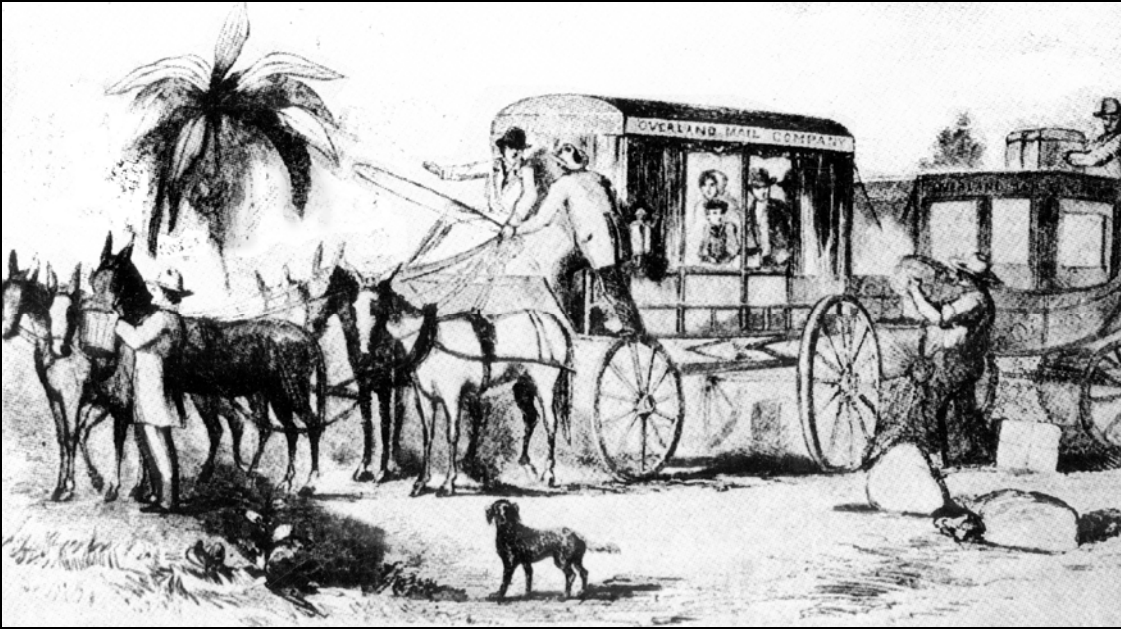
In spite of the regularity of arrivals and departures, a journey on the San Antonio to San Diego Line was an adventurous passage through an unsettled and dangerous frontier. The company recommended that each passenger:

...should provide himself with a Sharp’s rifle, (not carbine,) with accoutrements and one hundred cartridges, a navy sized Colts revolver and two pounds of balls, a belt and holster, knife and sheath; a pair of thick boots and woolen pants; half a dozen pairs thick cotton socks; three under (sic) shirts, three (sic) brown linen do (sic); three woolen over shirts, a wide awake hat, a cheap sack coat, a soldiers over (sic) coat, one pair of blankets in summer and two in winter; a piece of India rubber cloth for blankets; a pair of gauntlets; a small bag with needles, thread & c., in an oil silk bag; two pair of thick drawers, and three or four towels. Such money as he takes should be in silver or small gold. A person thus fitted out has no extra baggage (which indeed, cannot be taken), and can travel comfortably at any season of the year. [*San Diego Herald* 11-21-1857]

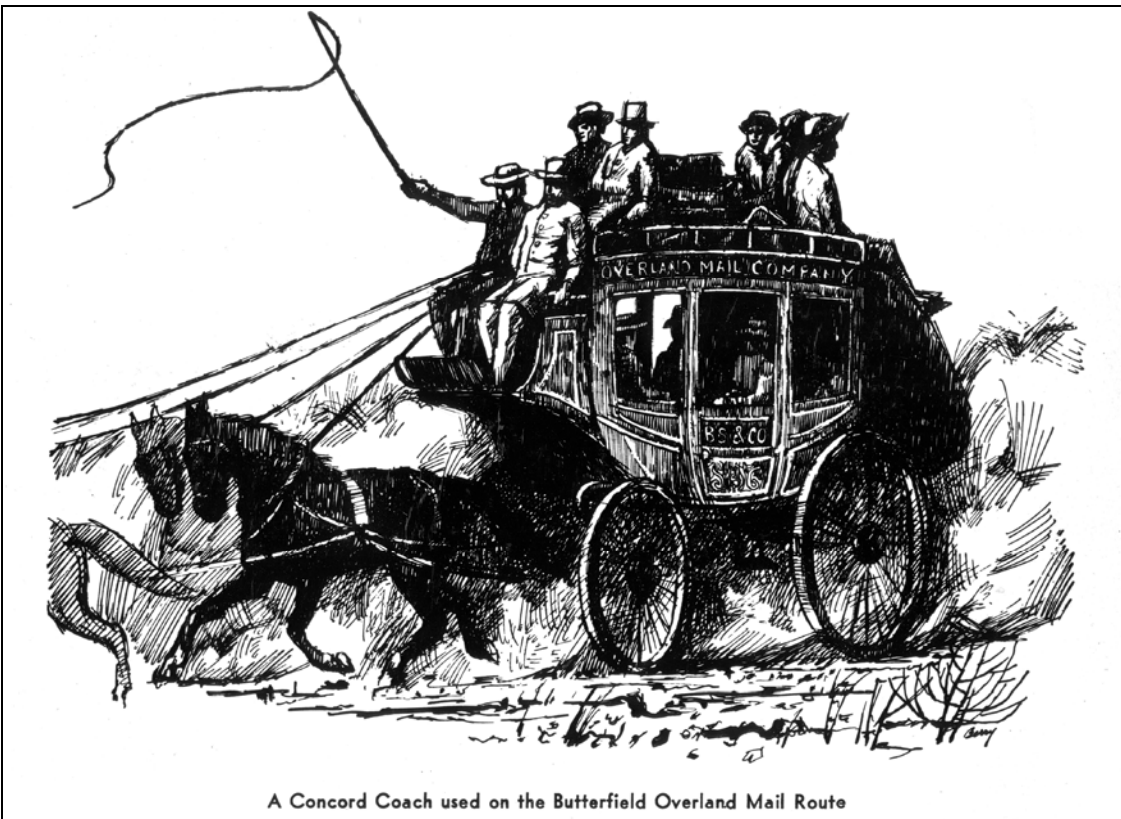
Although advertisement and reports mentioned coaches, actual accounts of travel on the San Antonio and San Diego line describe travel in celerity or mud wagons, also called ambulances (Figure 10b), the common military use for the same type of vehicle, rather than the better known Concord stagecoach of twentieth century western movies. More adept for travel over rough undeveloped terrain than the Concord, these stages were lower to the ground, lighter, and often open on the sides, or enclosed only with canvas curtains (Figure 11a). Like the Concord, the body of the celerity was suspended over the undercarriage by large leather straps called a through-brace.

Travel continued to be conducted in trains of coaches and mules even after the line became well established. Water holes may have been set up at 30 mile intervals. Many, however, remained unmanned, and actual stations could be separated by 100 miles. Traveling eastward from San Antonio in May 1858, Phocion R. Way described his outfit:

Our train presents a singular appearance: two ambulances loaded down with baggage and the mail. Every part of the stage where an article of luggage can be stored is filled. We can hardly find room to sit down. Our caravan is led by a drove of about 30 mules. These are guarded and driven by 4 men mounted on mules—two Mexicans—two Americans. They carry rifles strapped across the pommel [sic.] of their saddles, and large six shooters in



(a) "Mud Wagon" (courtesy of the San Diego Historical Society, Booth Photographic Collection).



A Concord Coach used on the Butterfield Overland Mail Route

(b) "Concord Coach" (courtesy of the San Diego Historical Society, Booth Photographic Collection).

Figure 11. Mud Wagon and Concord Coach.

their belts. Wed (sic) have large fierce looking fellows for drivers, who have been accustomed to frontier life and Indian fighting. They are armed the same as the guards. We have four passengers to each carriage, all of them well armed. We have forty-four shots in our carriage without reloading.

I neglected to state why we drove so many mules with us. They are called relays—that is, we drove one set of mules until dinner time and while we dine, turn them loose with the others to grass (they never fed them). After dinner we catch a new set and drive the rest before us, and so on until they have all seen service. It is a singular thing how these animals will either follow or lead the train—they are perfectly free but do not attempt to leave us. They are trained to it, and will follow us like dogs from San Antonio to San Diego. [Way 1858:44-45]

On parts of the road, the ambulances were changed for “a rickety carriage” and later “a heavy wagon, strong and would do but we should have another” (Way 1858:53). In places, passengers had to walk in order to relieve the fatigued mules (Way 1858:147). The mail usually moved ahead of the coaches by mule train, traveling night and day (*Sacramento Union* 1-11-1858; Way 1858:151; Johnson 1938:64). When Phocion’s party reached Tucson, those going to the Pacific Coast continued on muleback with the mail (Way 1858:151). The passenger stages traveled slower than the mule trains. In October 1857, it took the coaches from San Diego 23 days to arrive at Tucson, while the mule train with the mail made the same journey in seven. Phocion R. Way recorded the pace of his journey:

We stopped a few hours last night for rest. We started about two hours before day this morning and traveled until the sun was about an hour high, when we stopped to prepare our first meal. We have our provisions with us and we do our own cooking. We have good wholesome fare; and although we cook it in a primitive way it is very good, especially to appetites sharpened by travel and exercise. We all sit in the ground in a circle and eat our provender out of pewter plates.

We only cook two meals a day. We are very fashionable in our hours; we breakfast at 8 or 9 and have supper at 5 or 6 o’clock. We generally stop in the heat of the day to rest our mules, and then indulge in a cold snack or lunch of bread and dried beef. [Way 1858:45]

They slept on the ground every night and meals were almost always prepared in the open. The food varied slightly. At times described as “miserable—bad beans and bad bacon poorly cooked,” on other occasions the fare included beefsteak or mutton with breakfast of fresh eggs. All meals appeared to have included beans (Mexican *frijoles*) and coffee as consistent staples (Way 1858:53, 155). After several weeks of the outdoor life, stage travelers developed a wild and unkempt appearance. “We all wear nothing in this warm weather but a check shirt and pants and a belt around the waists where we can carry our revolvers and knives. We have not changed our clothes since we started, nor shaved our faces. And the hot sun has made us almost as dark as Indians” (Way 1858:48).

The few actual manned stations on the route consisted of Mexican native adobe, stone, or wattle and daub buildings—usually windowless—with thatched roofs and packed earthen floors. The latter were constructed of small woven branches, generally willow or ocotillo. At times they were left uncovered and on other occasions plastered with mud (Fay

1955, 1956, 1958, 1969; Lopez Morales 1987). Described as “a hard looking tavern,” “a primitive looking place,” a “regular backwoods establishment” or “odd looking” these stations often had one or two dwellings and a corral for horses and mules. The cramped quarters seldom provided sleeping space for stage passengers, who spread their blankets outside on the ground (Way 1858:43, 51, 53, 160) (Figure 12).

Passing through “a wild uninhabited” country, the journey was dangerous. Native American raids were not unknown and bandits attacked stations. These conditions affected the manner, attitude, and appearance of the local inhabitants:<sup>15</sup>

There are a good many border men living here and they are decidedly a hard looking set. They are generally fine specimens of the physical man but the life they lead is of constant danger and makes them bold and reckless. They seem to place no value on human life, and apparently think no more of shooting a man that offends them than they would of shooting a horse or dog.... Every man, no matter what his business goes well armed at all times. [Way 1858:44]

Everybody goes armed here. If a man has no shirt to his back he will have his knife in his belt. [Way 1858:159]

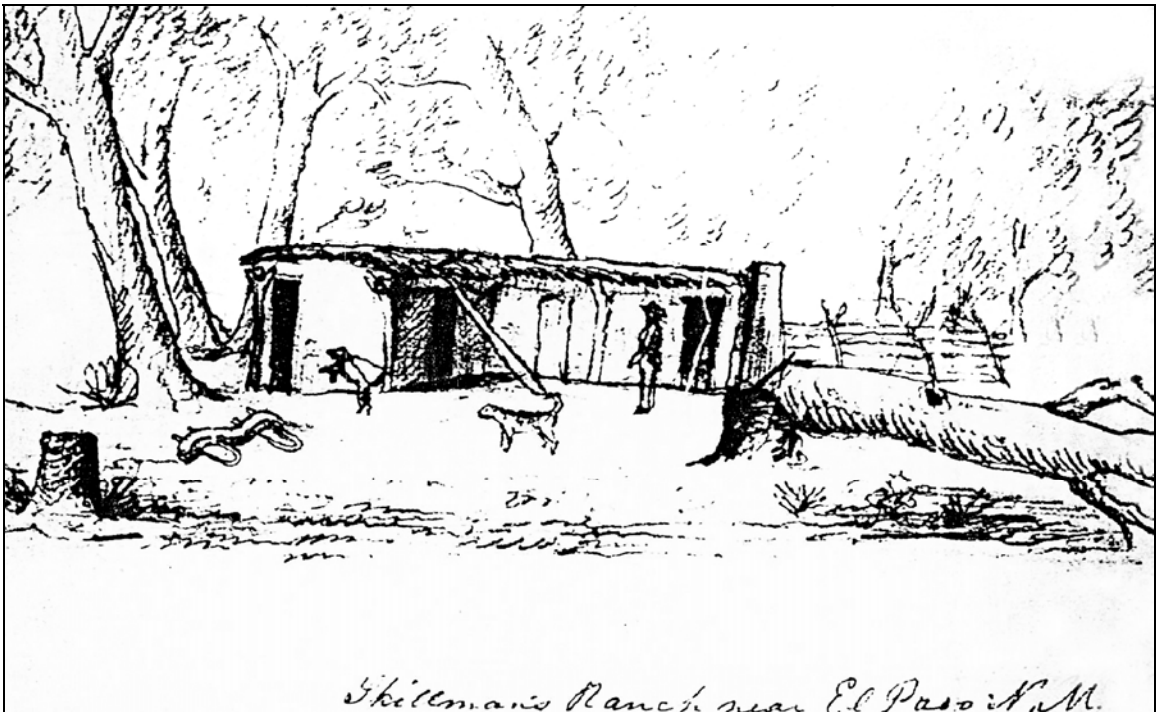
Two recent innovations in weapons—the Colt revolver and Sharps rifle—provided overland mail parties with exceptional firepower when compared to muzzle loading arms still commonly in use at the time. When Phocion Way left San Antonio, his group could muster 44 shots without reloading (Way 1858:44). By the time they neared Tucson their fire power had increased to 95 shots. “All our guards have Sharps rifles—the best most efficient gun ever invented. You can load them 5 or 6 times a minute” (Way 1858:47). As the stage traveled, passengers were compelled to be continually on their guard, to have their revolvers in their belts, and rifles where they could lay hands on them in a moment. “We walk about with our arms, we sit down with them by our sides, and we sleep with them” (Way 1858:51). At night they placed a guard over the mules, spread blankets on the ground “and lay down with our rifles and revolvers by our sides for instant use” (Way 1858:47).

Eastbound travelers found the same primitive frontier conditions after leaving San Diego. Through the mountains the coaches stopped at local ranches. The only actual company station in the desert appears to have been the one at Carrizo Creek. Watering holes located at Indian Wells, Alamo Mocho, and Cooke’s Wells were unmanned.

Charles F. Running, correspondent for the *San Francisco Chronicle*, rode the stage to Lassitor’s Ranch at Green Valley and then traveled by mule down Oriflamme Canyon to Vallecito on the desert.<sup>16</sup> The first day “We made twenty-one miles that p.m. and stopped at Ames Ranch. For supper we had jerked beef, tea, and *algunas tortillas mal hechas* (some badly made tortillas). Our landlady was an Indian woman.” The next day they journeyed another 27 miles to Lassitor’s, where they arrived late at night and “slept in low hut with fire in the middle, Indian fashion. Had a good supper and breakfast—fresh butter, bread, mutton, coffee” (Running 1858).



(a) Thatch Roof Wattle and Daub House with Wood Stockade Corral, Fort Davis, 1858 (original drawing by Phocion Way, reproduction courtesy of the *Journal of the Southwest*, University of Arizona).



(b) Wattle and Daub House with Thatch Roof, El Paso, New Mexico, 1858 (original drawing by Phocion Way, reproduction courtesy of the *Journal of the Southwest*, University of Arizona).

Figure 12. Thatch Roof Wattle, Daub House, and Wood Stockade Corral, 1858.

Here they left the stages and “rode on horseback” for 18 miles, “three of which were over snow, and we had a very steep hill to go down. The country is very hilly and almost destitute of vegetation...” Upon reaching Vallecito in the evening they slept in a sod house built there by James Lassitor in 1854, “on a hard dirt floor and had a tolerably good supper in the shape of ‘ragout,’ good coffee and butter. Here we met passengers coming from the other end of the route, five in number; they complained very much and had had a very hard time of it. I thought it a pity for one was a newly-married lady, and I thought it must have been a rather dangerous honeymoon. However, she was fat and hearty and had got along better than any of the men” (Running 1858).

Those who took coaches through Santa Ysabel and Warner’s Ranch found similar frontier conditions. After stopping at the Alvarado adobe in Peñasquitos Canyon, the stage continued to Santa Ysabel and then to the Carrillo ranch house at Warner’s.<sup>17</sup> On the desert at San Felipe, passengers found “an adobe house, brackish water, and poor grass, like that usually growing in salty land.” The proprietor, a German called Dutch Bill, “occupied the aforesaid adobe house and supports himself by selling necessities to travelers” (*San Francisco Herald* 12-27-1857; *San Diego Herald* 5-29-1858).

At Carrizo Creek, the mail company used the adobe constructed by the military in June 1855 as a station building. J. J. Thomas saw the place in the fall of 1857 as an “old adobe house,” occupied by William Mailland. The thatch roof had been burned off (*Sacramento Union* 12-24-1857). The unmanned water holes in the desert continued to be unreliable. Thomas found Indian Wells to be “small holes 20 feet underground where some water is obtained.” He described the smell to be “about as delicate ... as e’er rose from a barnyard. Here we feed animals with barley carried with us and refresh ourselves as circumstances permit” (*Sacramento Union* 12-24-1857). A few months later overland mail passengers camped overnight at Indian Wells, and had sufficient water for themselves and the animals, and enough wood for a fire. From this point they made the crossing to Fort Yuma without water, finding the wells at Alamo Mocho caved in, and Cooke’s Wells dry (*Sacramento Union* 3-12-1858).

The undercurrent of violence that permeated life along the eastern parts of the line also existed here. In May 1858 William Mailland, the station keeper at Carrizo, killed his Native American wife. The *San Diego Herald* reported on May 29, 1858:

#### MURDER at CARRISO

We have been furnished with the following facts in reference to the murder of the Indian Squaw at Carriso by William Mailland. Mailland occupied the adobe house at the creek, the squaw living with him. A deserter apprehended on the evening of the 12th inst., at San Felipe, stated that he had been in the house with Mailland the day before and that a party of 10 Indians armed with rifles had surrounded the house and were trying to get in and put Mailland to death. The deserter stated that he had escaped, but supposed that the Indians had, by that time, succeeded in achieving their purpose.

Maj. Riggold, U.S.A., en route to Fort Yuma, reached Carriso next afternoon and found two Indians at the door, which was barricaded, one of them being armed with a rifle. They both left soon after Major R’s arrival. Mailland was found to be in a state of delirium tremors - did not seem to have any clear idea of what had occurred—but admitted that possibly he may have killed



the squaw, but if he did he was drunk at the time and did not know anything about it. Major R. thought proper to get him away from present danger, there seeming great doubt as to the man's being in a sane state of mind, and he, therefore, had him placed in the ambulance and carried to Indian Wells, 30 miles into the desert, with the view of sending him back by some one of the wagons of the command then en route from Fort Yuma across the desert. He was accordingly carried back to Carriso, where he appeared perfectly recovered and sane, but indifferent and apparently insensible to the crime he had committed. The room where he had shut himself in had blood all over the floor, the bed was saturated with blood, and subsequently the body of the squaw was found buried behind the house. That night Mailland took himself off—was met by the mail riders and turned back with them, riding a spare horse some distance, but fearing the civil authorities, he concluded again to go into the direction of Fort Yuma. He accordingly got into Ingall's wagon and went with him as far as Indian Wells, where, taking the Paymaster's party again, he took to the bushes. It was supposed that he had perished on the desert. Then a traveler who stopped at Dutch Bill's at San Felipe, told Bill that he had seen Mailland across the Colorado, making tracks for Sonora.

Following Mailland's departure, Hamilton Breeze became station keeper at Carrizo Creek. The company paid him \$75 a month (San Diego District Court 1860). In addition to tending to the livestock and equipment of the stage line he ran a "public house" that provided meals, drinks, livestock feed, and other limited services for travelers on the road. Stage driver George E. Freeman remembered Breeze as "...chief cook and bottle washer. (He) cooked, tended the bar, and took care of some animals belonging to the S.A. & S.D. Mail Co." Merchandise and goods on hand included tea, coffee, sugar, hard bread, and whisky. Hay and barley were kept for the animals. The scale of this business was small. With the exception of the livestock feed, all the other merchandise could have been packed out on two horses. R. E. Doyle sent supplies from San Diego and Hamilton often obtained additional provisions from Vallecito and San Felipe (Freeman 1860). Hamilton Breeze left Carrizo Creek in October 1859 (San Diego District Court 1860). By this time the desert outpost had also become a station on the overland mail line headed by John Butterfield.

### **The Butterfield Overland Mail Company**

On July 7, 1857, the Postmaster General awarded the contract to provide overland mail service between San Francisco and the Mississippi to a combine headed by John Butterfield of New York. This group collectively controlled the most powerful express companies on the East Coast. They were to provide a semi-weekly service from two eastern termini at Saint Louis, Missouri and Memphis, Tennessee to San Francisco (Richardson 1925). The Missouri and Tennessee lines converged at Fort Smith, Arkansas. In Missouri, trains would carry the mail between the railheads at Tipton and the Mississippi River at St. Louis. In Arkansas, local stages were used to travel the route between Fort Smith and Memphis, Tennessee. The San Antonio to San Diego line continued to operate along its entire length through August 1858, while the newly formed Overland Mail Company, popularly known as the Butterfield Line, established a 3,000-mile stage route. Most of the road followed the Gila overland trail through the desert wilderness of the southwest. Tasks

for the new company included building and stocking 139 stations, along with associated corrals, wells, and cisterns, and assembling 1,200 horses, 600 mules, and 100 coaches. The company hired 750 employees to run the stations. Stages were expected to complete a one-way trip between the two termini in 25 days. The first stage left Tipton, Missouri, on September 16, 1858. The route now passed through Warner's Ranch and Temecula to Los Angeles rather than taking the Warner's-Santa Ysabel cutoff to San Diego (Richardson 1925; Pourade 1963:224-225).

The Overland Mail line developed a much larger and more complex infrastructure than the San Antonio and San Diego Mail. The company had manned stations every 10 to 15 miles, and occasionally 20 to 25 miles apart (Barrows 1896). These were grouped into nine divisions, each one under the direction of a superintendent. An agent served under the superintendent and had charge of a number of stations. The road between the Colorado River and Warner's Ranch was part of Division # 2, which included all stops between Fort Yuma and Los Angeles. Twelve stations, under the direction of Agent Warren G. Hall, spanned the route from Yuma through Warner's Pass and included Fort Yuma, Pilot Knob, Cooke's Wells, Gardener's Wells, Alamo Mocho, Indian Wells, Sackett's Wells, Carrizo Creek, Palm Springs, Vallecito, San Felipe, and Warner's Ranch. The stations within the United States, their personnel, available livestock, and feed on hand, taken from the 1860 Federal census, are listed in Table 1 and Table 2 (US Census Bureau 1860a, 1860b). The Federal Census did not include Pilot Knob, Alamo Mocho, Gardener's Wells, and Cooke's Wells since these stations were located in Mexico.

Table 1. 1860 Federal Census Listings for Butterfield Stage Stations.

INDIVIDUAL	AGE	SEX	RACE	PROFESSION	REAL ESTATE	PERSONAL ESTATE	PLACE OF BIRTH
<i>Warner's Ranch Station</i>							
Alexander Vance	28	M	-	Hostler	-	-	Ohio
<i>San Felipe Station</i>							
Warren Hall	40	M	-	Mail Agent	2000	4000	New York
Margaret Hall	34	F	-	-	-	-	New York
Anita Hall	2	F	-	-	-	-	California
Margaret Cook	69	F	-	-	-	-	New York
Oliver P. Cook	31	M	-	Hotel Keeper	-	500	New York
Joseph Lober	18	M	-	Cook	-	-	Germany
Hiram P. Huntington	37	M	-	Harness Maker	-	-	New York
Solmen T. Wormsley	31	M	-	Stage Driver	-	-	New York
George Freeman	43	M	-	-	-	300	Virginia
<i>Vallecito Station</i>							
Andrew Mulkins	26	M	-	Merchant	500	2000	New York
John Meir	37	M	-	Cook	-	300	Germany

Table 1. 1860 Federal Census Listings for Butterfield Stage Stations *continued.*

INDIVIDUAL	AGE	SEX	RACE	PROFESSION	REAL ESTATE	PERSONAL ESTATE	PLACE OF BIRTH
<b><i>2nd Household</i></b>							
Wm. Johnson	39	M	-	Hostler	-	-	Pennsylvania
John McClintock	36	M	-	Hostler	-	-	-
Numerous Native American Households Also Listed							
<b><i>Palm Springs Station</i></b>							
John White	30	M	-	Hostler	-	200	New York
<b><i>Carriso Station</i></b>							
William H. Yates	21	M	-	Hostler	-	200	New York
<b><i>Sackett's Station</i></b>							
George Taylor	30	M	-	Hostler	-	100	Pennsylvania
Maria Taylor	25	F	Ind.	-	-	-	California
<b><i>2nd House</i></b>							
Henry McClaghen	35	M	-	Station Keeper	400	200	Scotland
Edward Oathemer	30	M	-	Blacksmith	500	500	Pennsylvania
<b><i>Indian Wells</i></b>							
William Holmes	30	M	-	Hotel Keeper	-	500	Missouri
John Pete	30	M	-	Hostler	-	-	Tennessee
Thomas McWilliams	24	M	-	Hostler	-	100	Ireland
Maria Romero	22	F	-	Cook	-	-	California
Ysabel Romero	1	F	-	-	-	-	California
<b><i>Colorado, Station (Ft. Yuma)</i></b>							
Edward G. Stevens	32	M	-	O' Mail Agent	1200	6000	New York
George W. Jacobs	38	M	-	O' Mail Agent	-	-	New York
Henry W. Tibbetts	40	M	-	Clerk	-	-	New York
Garrett-Garretsy	46	M	-	Carpenter	-	-	New York
<b><i>(Ft. Yuma)</i></b>							
Arvin Harper	34	M	-	Blacksmith	-	-	Pennsylvania
Chauncey Jewett	36	M	-	Harness Maker	-	-	New York
Oliver M. Parks	40	M	-	Stage Driver	-	-	New York
Henry Stafford	33	M	-	Stage Driver	-	-	Pennsylvania
Andrew Baker	32	M	-	Stage Driver	-	-	New York
Newell Hosner	30	M	-	Stage Driver	-	-	New York
Hugh Doran	28	M	-	Mail Conductor	-	-	New York
Smite Tyler	32	M	-	Mail Conductor	-	-	New York

Table 1. 1860 Federal Census Listings for Butterfield Stage Stations *continued*.

INDIVIDUAL	AGE	SEX	RACE	PROFESSION	REAL ESTATE	PERSONAL ESTATE	PLACE OF BIRTH
<i>(Ft. Yuma) continued</i>							
George Andrews	26	M	-	Mail Conductor	-	-	New York
John McTusk	35	M	-	Mail Conductor	-	-	New York
John Loyd	37	M	-	Mail Conductor	-	-	New York
Louis Brewer	35	M	-	Mail Conductor	-	-	Maryland
Matthea Webber	42	M	-	Teamster	-	-	Virginia
Joe E. West	40	M	-	Teamster	-	-	Missouri
Dennis Tiemays	35	M	-	Teamster	-	-	Ireland
Henry Gilbert	34	M	-	Cook	-	-	Louisiana
Patrick Table	32	M	-	Hostler	-	-	Ireland

Table 2. 1860 Federal Census Economic Data for Butterfield Stage Stations.

STATION	REPRESENTATIVE	CAPITAL INVESTED	BARLEY	HAY	STOCK
Warner's Ranch	Alex Vance, Keeper	\$1000	12 ton	12 ton	4 horses
San Felipe	W. (Warren) F. Hall, Agent	\$5000	48 ton	36 ton	19 horses, 2 coaches
Vallecito	Wm. Johnson, Keeper	\$1500	12 ton	12 ton	6 horses
Palm Springs	J. White Keeper	\$1200	12 ton	12 ton	5 horses
Carrizo	Wm. Yates Keeper	\$1200	12 ton	12 ton	5 horses
Sackett's Well	George Taylor Keeper	\$1200	12 ton	12 ton	5 horses
Indian Wells	John Pettes Keeper	\$1200	12 ton	12 ton	1 coach, 5 horses
Colorado (Fort Yuma)	Edwin G. Stevens, Agent	\$10,000	12 ton	12 ton	5 horses

Carrizo Creek appears to have been occupied by employees of both the San Antonio and San Diego and the Overland Mail Companies, during the first year of the Butterfield Line's operation. George Freeman, a driver for that firm, was headquartered at Carrizo Creek, at the same time Hamilton Breeze ran the station for Giddings and Doyle (Freeman 1860). Following Breeze's departure in October 1859, the station seems to have been occupied exclusively by Overland Mail Company personnel (US Census Bureau 1860a, 1860b).

Yuma and San Felipe became the Overland Mail Company's two most important stations between the Colorado River and Warner's Ranch. The company had a major maintenance facility at Fort Yuma, with an investment of \$10,000. Twenty-one employees resided there including two agents, a clerk, carpenter, blacksmith, harness maker, four drivers, six conductors, three teamsters, a cook, and a hostler. Twelve tons of hay and barley were on hand although only five horses were kept there (US Census Bureau 1860a, 1860b).

San Felipe now served as the major change station west of Fort Yuma. The division agent, Warren G. Hall, resided there as well as five other employees: the station keeper (also

called an agent), a hotel keeper, a cook, a harness maker, a stage driver, and their families. The company had invested \$5,000 in the station. The post had 48 tons of barley, 36 tons of hay, 19 horses, and 2 coaches. The remaining stops, including Carrizo Creek, functioned as changing or “swing” stations to replace worn out teams with fresh horses. Most had a single keeper, identified as a hostler, who took care of the livestock and helped change the teams. Exceptions were at Vallecito, where two hostlers, a cook, and a merchant resided; Sackett’s Station (Wells) with a hostler, station keeper, and blacksmith; and Indian Wells, with a hotelkeeper, two hostlers, and a cook. The swing stations kept 4 to 5 horses and 12 tons each of barley and hay. Company investment in each station ranged between \$1,000 and \$1,500 (US Census Bureau 1860a, 1860b). Based on traveler’s descriptions, some also served as meal stops. The presence of employed cooks listed on the 1860 census, as well as descriptions, indicate Yuma, Cooke’s Wells, Indian Wells, Vallecito, and San Felipe provided food (Ormsby 1858; Tallack 1860; Farwell 1858).

A through trip between San Francisco and Saint Louis on the Butterfield line generally took between 23 and 25 days (Richardson 1925). Stages traveled day and night, stopping only briefly for meals and to change horses. H. D. Barrow, who traveled from Los Angeles to Missouri, remembered, “We traveled day and night by stage for about eighteen days and five hours.... Of course the journey was somewhat tedious, but this was more than compensated for by the incidents and variety of scenery ... and really, the weariness of stage travel was less disagreeable than sea sickness, etc., by water.... At first it was not easy to get much sleep, but after a couple of days out we could sleep without difficulty, either day or night” (Barrows 1896).

On the eastern portions of the route, where roads were improved, Butterfield’s company used Concord Coaches. On the west coast the Overland Mail Company, like the San Antonio—San Diego line, used celerity or mud wagons (see Figure 11). H. D. Barrows recalled that on his journey from Los Angeles they rode in “through-brace mud wagons” until reaching the neighborhood of Springfield, Missouri (Barrows 1896). A driver and conductor accompanied each stage; both went armed. Unlike the small arsenal of weaponry and large list of supplies and equipment required on the San Antonio—San Diego crossing, all the Overland Mail passenger needed “to tender himself comfortable is a pair of blankets, a revolver or knife (just as he fancies), and an overcoat, some wine to mix with water (which is not the sweetest quality) and three or four dollars worth of provisions, purchased in Los Angeles, to last him over the desert” (Farwell 1858). In addition, an ounce of tartic acid to relieve the diuretic effects of the desert water was recommended “as it has an admirable effect in relieving disagreeable sensations” (Farwell 1858).

Since the stage stopped only briefly at each station, passengers recorded few details. J. M. Farwell, correspondent for the *Daily Alta California*, arrived at Palm Springs on a bright moonlit night. “While we remained here the beauty and singularity of the scene will not soon fade from my memory. I was not long permitted to enjoy this, for the coach was ready and we were off again” (Farwell 1858). At Carrizo Creek they found “water still more sulphurous in its taste. We were, however obliged to fill some bottles with it for our own use, though the driver carries a supply, and so long as it lasts passengers are allowed free use of it. As the trip we now had to make was 32 miles in extent, we thought our course a proper one” (Farwell 1858).

William Tallack, traveling in 1860 reached Carrizo Creek Station at day break and found it “a solitary station in a scene of desolation not to be surpassed in the Arabian deserts.” Upon their arrival the driver lay down “to snatch ten minutes sleep after the night’s exertion ... and was instantly unconscious in profound slumber, from which he has speedily to be roused again.” After passing a party of “forty United States soldiers, covered with dust and tattered clothes,” they continued “driving for hours through a wind as hot as from a furnace,” and reached Indian Wells “-a miserable adobe with walls black inside with clustering flies, but where we were refreshed with coffee” (Tallack 1860).

Meals could be had along the route for 75 cents. They included “Beef, dried apples, beans, potatoes, and frequently pies and venison. “Hot rolls occasionally, like meeting a long absent friend, make their appearance and as suddenly disappear.” At Alamo Mocho, Lang breakfasted on “tough steaks at four a.m. in another dirty dusty adobe” (Farwell 1858).

The harsh desert elements did take their toll. Riding hour after hour the stage became “enveloped in clouds of fine clayey dust.... What with the hot wind, the dust, and the perspiration, our faces and hands became covered with a thin mud, only removed to be speedily renewed as we proceeded” (Farwell 1858).

The stage frequently passed Native Americans. Not only in their villages at San Felipe, Vallecito, and Fort Yuma, but also along the road “crossing the desert on foot, carrying their water gourds ... these did us no more harm than to make faces at us and grin as our horses shied from them. I found the journey quite unpleasant in the wagon; but they seemed to enjoy the walk, as if used to it.” Emigrant trains were also a common sight with “many cattle and oxen dying on the desert from want of water,” as they had in 1849 and 1850 (Ormsby 1858:90).

With inauguration of Overland Mail Company service, the San Antonio and San Diego became two short branch lines at either end of the nation’s southwest border. On October 22, 1858, the Postmaster General discontinued service between El Paso and Fort Yuma where it overlapped the Missouri to San Francisco route. The stages of the San Antonio and San Diego now provided connections from these two cities to the transcontinental Overland Mail. In compensation, the Post Office Department upgraded operations on the two branches to a weekly service (Tamplin 1979:88; Johnson 1938:27). In 1859 the San Antonio—San Diego had “50 fine new coaches, 400 mules, and 64 men.” Drivers maintained an average speed of six miles an hour (Banning 1928).<sup>18</sup> Newspapers in San Francisco and Sacramento, both connected to the Overland Mail, resented continuation of the San Antonio—San Diego in even this limited form, dubbing it the “San Antonio & San Diego Jackass Overland Mail Route” and demanding that Congress “lop off this useless mail” (*Sacramento Union* 11-15-1859; Banning 1928). It was this attack that gave the line its nickname, “Jackass Mail.” On April 1, 1860 the Post Office Department reduced the line even further and discontinued service between Fort Yuma and San Diego (Tamplin 1979:89).

Within a year, overland mail service over the Southern Route ceased. With the outbreak of the Civil War in the spring of 1861, almost half the route lay in Confederate States. On March 2, 1861, the Post Master General stopped mail delivery on the Southern Route and implemented a six-times-a-week service on the Central Route along the Platte River and through the Rocky and Sierra Nevada mountains between Saint Joseph, Missouri

and Placerville, California. Butterfield ceased operations in April and Wells Fargo and Company began service along the new route in July (Tamplin 1979:91).

## **THE CIVIL WAR**

Once again, national affairs changed the dynamics of travel across the Colorado Desert. Although emigrants and livestock herds still continued to move westward toward the California Coast, now large groups began to move eastward across the trail. First came southern sympathizers returning home to fight for the Confederate States, followed by U.S. Army troops intent on securing the southwest for the Union.

In October 1861, the First Infantry of California Volunteers received orders to relieve the regular troops at Fort Yuma. They left Camp Wright near Warner's Ranch and made the crossing to Yuma the last week of October. The next four years saw a constant stream of men and supplies, dispatched from Drum Barracks in Wilmington, near Los Angeles, moving across the desert. They supported Union military actions in Arizona and New Mexico (Tamplin 1979:94).

When the first detachments of California Volunteers marched eastward to replace regular troops at Fort Yuma, they found the former Overland Mail stations along the road abandoned. Many still had stored forage left by the Butterfield Company (Davis et. al. 1897). By December the stations had been manned by the Army, as supply depots to support troops and wagon trains en route to Fort Yuma. John Warner, former owner of Warner's Ranch, stopped at Carrizo Creek on the evening of December 1, 1861, and "had dinner with Sergeant McCalaggan, an old soldier and a good true man" (Davis et. al. 1897).

In February 1862, Confederate Captain Sherrod Hunter occupied Tucson. In response, U.S. Army Colonel James H. Carleton mounted an expedition against the Confederates in Arizona. Fort Yuma served as the "jumping off point" for the expedition. Here the force of 2,500 men along with the arms, supplies, wagons, and animals required to keep them in the field was assembled.

With hundreds of troops and large wagon trains of supplies moving from the coast to the Colorado River, maintenance of the road and the establishment of supply lines became imperative. Stores of hay and barley were kept at all the former overland stage stations between San Felipe and Fort Yuma. Special detachments were sent to clean out and repair all the wells between Carrizo Creek and the fort. Water barrels were put into the ground at many of these locations. Troops and wagon trains crossing the desert were ordered to send an advance party one day ahead to fill the barrels so that the water would be available upon arrival of the main force. Upon leaving, enough water was to be left in the barrels so that they would not dry out and fall apart (Davis et. al. 1897).

In the spring of 1862, the garrison at Fort Yuma was increased in preparation for the Arizona campaigns against the Confederates occupying Tucson. As the weather warmed up, detachments crossing the desert received specific orders to assure the safe arrival of troops and animals. On April 17, Lt. Cutler wrote to Captain Shirland of the First Cavalry of California Volunteers:

Captain: The colonel commanding the district directs that you march your company without delay to Fort Yuma. You will have ten days rations of subsistence, 100 rounds per man for the Sharps carbine, and fifty rounds per man for the navy revolver. Your transportation will be three wagons from

McDonalds train. Each wagon will have two or three water kegs for use on the desert. You will be careful to send a small party a day in advance with buckets to fill barrels at the different wells, and leave a small party a day behind with orders to leave all the barrels full of water for the next company which follows you. You will start from your present camp, from camp Wright, and from Carriso Creek with your wagons laden to 3,000 pounds each, made up of forage. Mr. Beard has doubtless made arrangements for beef to be driven on the hoof for your use. If the days are hot you must travel by night. Your men must walk at least half the time by the watch. Practice as you march along, one hour each day, the saber exercise. It will require great judgment to get your horses across the desert in as good a trim as they are now. [Davis et. al. 1897]

Colonel Carleton directed similar orders to Cavalry Captain Shinn on April 26:

Captain: I presume you will arrive at San Felipe to-day. Stay at that point the whole of the 27th instant; leave for Vallecito on the 28th; leave Vallecito for Carriso Creek on the 29th; leave Carriso Creek for Indian Well at 4 p.m. on the 30th. I shall cause all the water at Sackett's Wells to be saved for you; but these wells are drying up so you must not count on even one gallon per animal. Have all your kegs filled at Carriso Creek. Have your barley soaked, so as to feed of soaked barley at Sackett's Wells, five quarts per animal. At Sackett's well you will find a feed of hay. Thus you will arrive quite fresh at Indian Well early on May 1. Start again at 4 p.m. with soaked barley for the nights feed... [Davis et. al. 1897]

The next day Colonel Carleton issued Special Order No. 51 stating that after that date, troops and wagon trains would cross the "Yuma Desert in the night starting from Carriso Creek at 4 p.m. going eastward." Cavalry and quartermaster's supply trains had to be broken up so "as to not have over eighty animals leave Carriso Creek twenty-four hours in advance of the next eighty. Thus the supply at Indian Well, the Alamo, Cooke's Wells will each afford a supply for eighty animals" (Davis et. al. 1897:1033).

The following day Colonel Carlton sent detailed instructions to Colonel Bowie at Camp Wright near Oak Grove describing how the above orders were to be carried out:

Colonel: About the time this reaches you, say the 30th instant, some trains will be near your post en route from San Pedro to Fort Yuma. These trains must be so divided at your camp that not over eighty animals, whether horses or mules, be at any one point on the desert on any one day. This precaution is rendered necessary from the failing of the water at Sackett's Wells. All the marches from Vallecito across the desert must be made at night, starting from each point at 5:30 p.m. The increasing heat of the weather renders this absolutely necessary. You will arrange the program of the movement of the trains accordingly, giving to each conductor a written report of the hour and day when he is to leave for the following places, viz: Vallecito (water plenty, perhaps some hay, hardly any grass here to be obtained). Carriso Creek (water plenty but bad; no grass, no hay). Indian Well (water to be drawn up by buckets; more can be gotten by having a man descend the well there to dip the water into the buckets by a cup as fast as it runs in; this will take all



day steady work to water the animals, no grass, no hay). Norton's Wells (water abundant to be drawn up in buckets; no hay, no grass). Cooke's Wells (water abundant possibly no hay, no grass). Pilot Knob (on the river probably no hay). Fort Yuma.—Send forward by the different divisions of the trains thus marching a day apart (omitting to send any of the infantry with one with which Lt. Hammond is to come on without delay, with a half company of cavalry)... You will find barley at San Felipe, Carrizo Creek, Indian Well and at Norton's Wells. If you cannot make arrangements to have fresh beef delivered to each train, each detachment or each company thus leaving Camp Wright on its march across the desert, you must be sure to cause your commissary to issue pork if necessary the whole distance. The teams must not be overloaded as the weather is getting hot. Have the teams load mostly with subsistence stores, being sure to have barley enough on to last, say, eighty miles, in case of accident or failure of supply at any one station. Each company will bring its quota of the rifled musket ammunition... This letter places you in control of all trains passing your post eastward until you yourself leave, and enjoins upon you the care that they shall be so instructed that not over eighty horses or mules aggregately, be at any one of the points before mentioned at the same time. Each wagon should, if possible, have two water kegs. Marching by night the men and animals will suffer but little for want of water... [Davis et. al. 1897]

Colonel Carleton and the California Volunteers waged an effective campaign against the small Confederate forces operating in Arizona and reclaimed the southwest for the Union. As historian Clifford Trafzer has noted, the "Yuma Crossing was significant to Carleton and the California Column, for it was there that they ferried their food, mounts, arms, and supplies across from California and into Arizona. It was from Fort Yuma that they launched their small but decisive campaigns against the Rebels" (Trafzer 1980:68). Carrizo Creek and the other overland stage stations played a vital role in these operations as supply depots and watering places for the thousands of troops and animals that crossed the desert in support of Carleton's forces.

## **POST CIVIL WAR THROUGH THE 20TH CENTURY**

Following the Civil War, travel on the trail between Yuma and Warner's Ranch declined somewhat compared to former decades. Stages from San Diego to Yuma followed a more direct road opened in the late 1860s that came through the mountains via Jacumba and Mountain Springs, passed by Carrizo Creek and other stations to the north, and intersected the traditional overland trail south of Sackett's Wells. The route through the Carrizo Corridor and Warner's Pass did continue to be used by overland stage lines running between Los Angeles and Arizona (Wright 1961). Stage service between Los Angeles and Yuma had evidently been intermittent at least since the middle of the decade. In February 1867, General James S. Russling, on a military tour, left Drum Barracks for Fort Yuma in an ambulance provided by the Quartermaster. He had intended to go by overland stage "but the route to Yuma had just been changed from Los Angeles to San Diego" (Russling 1877:339). By 1869, however, two lines had resumed operations along this road: Barlow and Sanderson as well as Tomlinsong and Griffen, both running between Los Angeles and Tucson. The Tomlinsong line stopped at San Bernardino (Telfer 1951).

Information on travel through this part of San Diego County for the period is scanty. Russling recorded one of the best accounts and found the country occupied by:

...only a scattered ranch here and there, every ten or twelve miles apart, of the rudest character - sometimes not even these - where coarse groceries, canned fruits and vegetables, and whiskey and mescal, were kept for sale to Indians and passing travelers. These had mostly been stage stations on the great Butterfield Overland Route before the war, and when this broke that up, these ranchmen still remained, hoping something would "turn up." The station at Carissa Creek was a good representative of this, and likewise of many others.

"Carissa Creek" itself is one of southern California's "blind" streams, like so many in Arizona, beginning and ending nowhere in particular - without either source or mouth apparently. Issuing from a sand-heap, it terminates in another a few miles away; but just here at the station is a shallow creek - a few yards wide, by six inches deep - tainted, of course with alkali. The station itself is the adobe remains of an old stage station, whose roof was all gone, and as a substitute the enterprising proprietor had thrown some poles across, and covered them with willows and coarse grass. This turned the sun somewhat, and the easy-going proprietor said, "'Twern't no use, no how, to roof agin rain; 'cause, you bet, stranger, no rain ever gits yer!" His forlorn structure, part of which was used for a chicken-roost, also served its owner as bar-room, grocery, kitchen, parlor, bed-room, etc., and yet contained only one rude apartment, altogether. "Mine host" here was a Texan, who somehow had strayed away out here, and dropped down at Carissa Creek - he hardly knew how. He "didn't think it much of a place, that's a fact; no how, stranger! But then, you see, I'm yer; and it's a heap of trouble to move elsewhar! Besides, yer know, I couldn't recommend nobody else to buy me out, no how! Somebody has got to live at Carissa Creek, anyhow; and why not me?" His philosophy, under the circumstances, seemed delicious, worthy of Mr. Mark Tapley himself; and, of course, we had not the heart to disturb it.

For meals and lodgings en route, we did indeed have to "rough it" pretty generally, nearly everywhere especially after passing Vallecito. Salt pork fried, saleratus biscuit hot, and coffee plain, came again into vogue. [Russling 1877:348, 349]

Russling did not meet many emigrants on the road from the eastern United States. There were groups of Mexicans, Imperialists who had supported Maximilian, fleeing the forces of Benito Juarez who had occupied Sonora. At Carrizo Creek he encountered "a party of these, resting there during the heat of the day. The men were lounging about the station, or sleeping in the sand; the women, washing clothes in the little creek. Their animals - a heterogeneous herd of horses, mules, and broncos - were browsing by the roadside, on chemisal, mescal, or whatever they could pick up." The resident "keeper" at the station stated that in the previous four months about 1200 Imperialists had passed northward, fleeing Mexico, "while during the same period only about 200 Liberals had returned to Sonora" (Russling 1877:353).

The San Diego County Register of Voters lists 28-year-old Henry Wilson from Pennsylvania as “station keeper” at Carrizo in April 1867. He undoubtedly is the “mine host” referred to by Russling. In 1869, Henry Bascar Spratt, age 32, is listed as a merchant at “Carrisa Creek.” An 1869 tax record for Henry Spratt lists him as owner of a ranch at “Carissita Creek,” with \$300 on hand. He is also listed at Carrizo in the Register in 1871 and 1875 (San Diego County Register of Voters 1869, 1871, 1875; Tax Record 1869; Strahlmann Notes n.d.; Brigandi 1995).

The 1875 Register listing for Henry Spratt is the last documented record of occupation for the Carrizo Stage Station that has come to light. In 1877, the Southern Pacific Railroad completed the Yuma to Los Angeles link of its transcontinental line and overland travel along the Carrizo Corridor and through Warner’s Pass became a trickle of what it had formerly been. The adobe at Carrizo Creek, protected only by a thatch roof, quickly fell into ruin in spite of the arid desert climate. The earliest known photographs of the building, dating from the 1890s, show only melted wall stumps and a fireplace remaining (Figure 13). When avocational ethnographer, collector and photographer Edward Davis passed the station site in 1896 he found the ruins so deteriorated he did not feel they merited a photograph (Davis 1935).

## **END OF THE LIVESTOCK TRAIL**

Travel on the overland route between Warner’s Ranch and Carrizo Creek ended the way it had begun, as a livestock trail. This is not surprising, for in actuality, herds of animals had always been the major users of the route during all periods of its development. Mexican horse traders had opened the trail. Following the American conquest, herds of cattle and sheep were constantly driven westward. Historian Phil Brigandi has done an excellent job documenting the hundreds of individual drives that are recorded along this route. The following information is taken from his report on *The Livestock Industry on the Anza-Borrego Desert* (Brigandi 1995). In 1848, T. J. Trimmer drove 500 head of cattle from Texas to California. The gold rush opened new markets in Northern California and livestock herds continued to be driven down the trail after the main surge of immigration had subsided. During 1854 more than 61,000 cattle crossed the Colorado River into California. Herds ranged in size from 600 to around 1,000 head. Traffic declined in the late 1850s due to a drop in prices. Following the Civil War, the market returned and in 1868 an estimated 50- to 55 thousand head of cattle were on the trail from Texas to California. With the completion of the Southern Pacific railroad, the major cross-country cattle drives ceased, but local livestock raisers continued to cross the desert with their herds (Vail 1974). As late as 1919, cattle were still being driven across the desert between Carrizo Creek and Yuma (Brigandi 1995; Figure 14).



*(a) "Carrizo Stage Station Ruins," circa 1880s, view to northwest  
(courtesy of the San Diego Historical Society, Booth Photographic Collection).*

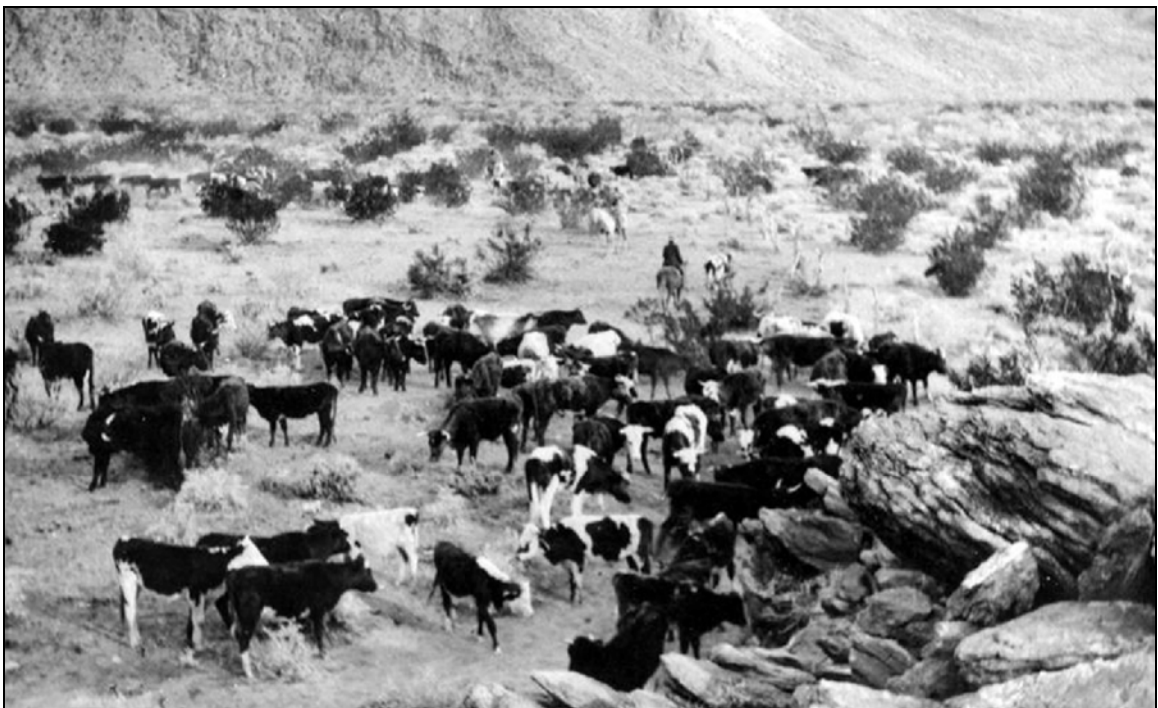


*(b) Carrizo Stage Station Site, 2001, view to northwest (by California State Parks).*

**Figure 13. Carrizo Stage Station Ruins, 1880s, and Site, 2001.**



(a) "Box Canyon," early 20<sup>th</sup> century  
(courtesy of the San Diego Historical Society, Booth Photographic Collection).



(b) "Driving Cattle up the Trail," 1910  
(Edward H. Davis Photographs, California State Parks, Colorado Desert District).

Figure 14. Box Canyon and Driving Cattle up the Trail, Early 20th Century.

## ENDNOTES

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<sup>1</sup> Vallecito appears to refer to the valley and Ojo Grande to the springs as per Emory 1848 and Clarke 1849.

<sup>2</sup> A native of Connecticut, Warner first journeyed west to Saint Louis in 1830 and became a clerk on a trading expedition to Santa Fe, New Mexico for the famous mountain man Jedediah Smith. He married Anita Gale, a daughter of sea captain William Gale. Anita had been raised by the mother of Pio and Andres Pico. The request included the entire valley which he described as vacant and “surrounded by the mountain with entrances from San Felipe on the east, from Temecula on the north, from Pala on the west and from Santa Ysabel on the south” (Petition 1844). The governor granted his request on November 28, 1844 (Grant 1844). By the late 1820s, cattle were raised specifically for their hides, and approximately 40,000 were exported annually (Bandini 1828). English and Boston ships carried an estimated 6 million hides and 7 thousand tons of tallow out of California between 1826 and 1848 (Weber 1982:138). Warner grazed herds of cattle, horses, and some sheep in the valley and grew corn and beans on a small plot of land near the hot springs (Warner 1886:106).

<sup>3</sup> At San Pasqual Kearney’s Dragoons were routed by the Mexican forces with a significant loss of life. For details of the battle see Richard Pourade 1964, *The Silver Dons*.

<sup>4</sup> Cooke followed the road north from Warner’s Ranch to Temecula before turning south to San Diego. The trail from Valle de San José to San Diego via Santa Ysabel did not become a wagon road until 1849 (Bibb 1995).

<sup>5</sup> Journals of the Army of the West and the Mormon Battalion do not use the name Rajadura to identify this water source. It is simply referred to as First Well. The Gold Rush Argonauts of 1849 began to call it Cooke’s Well. Major Heintzelman continued to call it by its Spanish name La Rajadura.

<sup>6</sup> Although coming out of El Puerto, the trail across this ridge was later referred to as Vallecito Grade. It is now called Campbell Grade.

<sup>7</sup> A journey of the San Antonio and San Diego Mail coaches over the San Pasqual route was described by the *San Francisco Herald’s* correspondent in November 1857 (*San Francisco Herald* 11-25-1857).

<sup>8</sup> Major Heintzelman made the following journal entries documenting emigrants from Sonora and New Mexico on the road with herds of livestock (White 1975):

Saturday August 7, 1852

Danson Lopez, the owner of a flock of sheep, called to see me. He comes from Santa Fé with a passport signed by Gov. Calhoun. The bill for ferrying 4,856 sheep comes to \$1000. Mr. Iager accompanies Lopez to collect the ferriage at Los Angeles.

Wednesday August 18, 1852

Quite a number more emigrants have arrived. The owner of some sheep talked about buying Johnson’s boats, ferrying himself across, and then selling to a man behind, who they say has 27,000. . . .

Saturday February 28, 1852

When we got to the Rakadura (Rajadura), we met some Sonorans who had been robbed.

<sup>9</sup> Major Heintzelman noted the following road work and well improvement details in his journal (White 1975):

Monday November 4, 1850

The train got in about 9 AM. I immediately commenced unloading and reloading so as to take 4,000 rations. The other train of eight wagons, is at Warner’s. I will send a party back in the morning to improve the road between here and San Felipe (Box Canyon).

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Sunday February 29, 1852

The party I left to dig out Cooke's Wells report two and half feet of water. I must dig wells at the pond beyond Alamo Mocho, and then beyond Cooke's in the Big Mesquite.

Saturday May 22, 1852

Davidson started in this morning with fifteen men to dig wells near the Alamo Mocho.

<sup>10</sup> Overland journals indicate Warner built the trading post sometime between September and November of 1849. When the parties of William H. Chamberlain, L. N. Weed, and a group of unidentified travelers interviewed by Cave J. Coutts passed through the valley on August 18, September 9, and September 16 of that year no structures existed at the fork in the road leading to San Diego (Chamberlain 1849; Weed 1849; Coutts 1849). By November 28, 1849, however, he had completed the building and was open for business when Lorenzo Aldrich stopped there, noting in his journal that "Provisions could be obtained at high rates" (Aldrich 1851). Another traveler who felt Warner's prices were high was Cornelius C. Cox who noted on December 28, 1849: "Arrived at Warner's Ranch and finding good grass, lay by one day. The road here forks, one leading to San Diego, the other to Los Angeles. Warner has established a grocery and butchery for the accommodation of the emigrants - and this being the first place at which supplies can be obtained, the emigrant has been subjected to the severest extortion . . ." (quoted in Wright 1961:22, ft 1). The trading post consisted of a rectangular adobe building with a thatched roof divided into two rooms. A thatched ramada (described as a shed by Benjamin Hayes in 1850) on the front covered an exterior patio and work area. When Benjamin Hayes visited the building in December 1850 he saw several partially cured hides pinned down in front of the patio. Freshly butchered beef hung on a pole in the shade under the ramada near the building's front door (Hayes 1850). Additional outbuildings were located around the structure but details of their function and location have not been recorded (Sacket 1856). According to the 1850 census the house and store were occupied by Warner, his wife and three children and several hired help including Joseph Manning, an overseer from Missouri, laborers José Urbano de Jesus, Francisco Verdugo, and Ignacio Chapa, and three male and three female Native Americans (Roth 1981). The number of hired help as well as resident Native Americans, who were probably additional hired laborers or servants, also suggests outbuildings existed for their quarters which passing emigrants failed to note.

<sup>11</sup> The overland emigrant trade began to make Warner quite prosperous. Research by historian Linda Roth concluded that in 1850 he was one of wealthiest land owners in San Diego County. In early 1851 the county tax assessor valued Warner's Ranch at over \$30,000. This made him the second wealthiest man in the county, surpassed only by Pio Pico's Santa Margarita Rancho at \$84,990. Since Warner's beef came from Santa Margarita the emigrant trade undoubtedly made a substantial contribution to Pico's affluence (Roth 1981:204) Warner's assessment included:

Rancho Containing 10 Leagues	\$30,000
Houses and Improvements	500
35 team horses at \$30	1,050
193 mares and colts at \$7	1,351
5-1/2 yoke of oxen at \$50	275
20 milch cows at \$20	400
160 wild cattle at \$8	1,280
75 sheep at \$3	225
7 hogs at \$8	56
Farming utensils	200
Total	\$35,337

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Warner's prosperous trading post would come to a sudden and abrupt end as a result of an Native American uprising. Beginning in November 1851 and continuing through mid-January of the following year, Antonio Gara, chief of the village at Agua Caliente Hot Springs, organized local tribes in an unsuccessful revolt to oust American settlers from the land (Carrico 1985:67; Phillips 1975:71-94; Roth 1981:205-209). On the night of November 21 Gara's followers at Agua Caliente murdered four Americans who had gone to the Hot Springs to rest. Early the next morning they attacked Warner's trading post (Bibb 1976; Moyer 1969:13). The pueblo of San Diego was alerted on the morning of November 27, when the *San Diego Herald* reported "Our city was thrown into a high state of excitement, on Sunday afternoon last, by the arrival of an express from Agua Caliente, the residence of Hon. J. Warner, State Senator, conveying the intelligence that Native Americans, who are numerous in that vicinity, had risen and attacked his ranch, destroying all his household property, and running away his stock, consisting of large and valuable bands of cattle and horses" (11-27-1851). Rumors of an uprising had been prevalent for weeks and on November 20<sup>th</sup>, 1851 Mrs. Warner had been warned by a "friendly Indian" that members of his village intended to attack their residence and store. Warner sent his wife and children to San Diego and began to "place his house in a state of defense." The cattle were corralled and four horses saddled and tied next to the door. At approximately 2 a. m. on the morning of November 22, an estimated 100 Native Americans surrounded the house and drove off the cattle. Warner and two "employees" opened fire. Four natives and one of Warner's party were killed. Warner and the remaining survivor fled on horseback. The Native Americans "rifled" the house of everything it contained (*San Diego Herald* 11-27-1851). They then set it on fire. Warner managed to run off his herd of brood mares before the natives could capture them. He lost everything in the house and an estimated 400 cattle (District Court, Case 56, Statement of Case; Sacket 1856; Ortego, J. 1856; Ortego, A. 1856; Warner 1886:45-46). By January the rebellion had been put down and the instigators arrested. Antonio Gara, Warner's former overseer at the hot springs, William Marshall, and several others were executed the following December (Roth 1981:209; Bibb 1976).

Juan José Warner never returned to live permanently at the ranch. His family remained in San Diego. Warner had been elected to the State Senate and spent most of his time in Sacramento and San Francisco (Couts 1856; Witherby 1856). In addition, he served on the San Diego County Board of Supervisors. During his tenure as Supervisor of Highways in 1853, the overland trail from San José Valley to Yuma was declared a public road (Roth 1981:211; Morrison 1962:50).

In February 1852, Russell Sacket passed through Warner's Ranch and saw the former trading post and store "destroyed and in ruins, and not occupied" (Sacket 1856). The following year, other visitors noted the abandoned ruins of Warner's former store. During the early 1850s the United States government commissioned several railroad surveys in order to find suitable passes through the California mountains from the desert to the coast. An expedition led by Lt. R.S. Williamson examined the Gila trail through Warner's pass and San José Valley. On December 17, 1853 Lt. Williamson passed through the valley and recorded: "We descended the western side of the mountain and passed the ruins of Warner's adobe house, but instead of turning north to our former encampment in the valley, turned off to the south on the road to Santa Isabel" (Williamson 1856:125). On another trip along the emigrant trail a member of Williamson's expedition noted: "We passed the ruins of Warner's adobe house, which it is said was burned by the Native Americans, and soon reached the camp of the main party" (Blake 1857:109). The overland trail through the valley continued to be an important corridor. In the mid 1850s it became the route for transporting thousands of sheep and cattle into California (Roth 1981:213; Bell 1932).

<sup>12</sup> The following history of Sackett's Wells was recorded by Titus Fey Cronise (1868:96):

From Warner's Ranch, a town located on the eastern side of the Coast Range, near Warner's pass, on the Fort Yuma road, at the western edge of this desert, for about thirty miles south to Vallacito, the country has a less desolate appearance. The coast mountains, covered with timber and chaparral, skirt the desert on its western side, and take from it the monotonous and dreary character which marks the broad, sandy plains beyond this point, where the country is indeed a desert, without a sign of animal or vegetable life, or a drop of water, for nearly sixty miles. This long stretch of hot, shifting, alkaline sand, was



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a terror to travelers until the Government, in 1850, caused several wells to be sunk at a place since known as Sackett's wells, about forty miles from Vallecito, which furnished a fair supply of water, such as it was, till June, 1867, when a terrible sand-storm covered the whole country in that vicinity with a bed of sand several inches deep, obliterating the wells and all the landmarks around them.

<sup>13</sup> On October 18, 1856 the *San Diego Herald* ran the following article describing some of the preliminary meetings held to establish the overland mail route (W. Davidson's 1931 notes).

#### NEW PROPOSED STAGE ROUTE

The Austin Texas State Gazette publishes the report of a public meeting of the citizens of El Paso County, held for the purpose of taking into consideration the propriety of a tri monthly mail coach line from San Antonio, by way of El Paso to San Diego, in California. A committee was appointed to draft resolutions and make a report. The following is a portion of the report, in which the advantages of the route are spoken of.

"That they are deeply sensible to the great importance of calling public attention to the necessity and propriety of establishing a tri-monthly line of mail coaches, from some point on the Gulf of Mexico, by way of San Antonio and El Paso to San Diego, in California. This route is eminently the best and most practical; free from the snows of winter and the withering heat of summer, passing through a climate salubrious and delightful, tracking fertile and beautiful valleys, and not endless treeless parries and scorching deserts of sand; encountering abundance of wood, water and grass, and not thirsty desert plains, and bleak, barren mountainous, burning as a furnace in summer, and frozen and ice cold in winter, open and passable at all seasons, with everything to cheer the emigrant and traveler, in rich soil and varied landscape, with no mountain barriers, - no natural wall across the pathway, the route contemplated is superior for a great mail route and emigrant road across the continent, to any other north of it and this can be born out passing through our own territory.

The establishment of a tri monthly mail line, on coaches, by this route, would tend greatly not only to develop the resources of Northwestern Texas, but would be the first active, progressive step in the establishment of the great Southern Pacific Railroad. It would direct public opinion to defiantly settle down on the route which is marked by nature as the nearest, cheapest, and best. It would form an active stream of travel across the continent, and unfold to light not only our great resources, but the practicability of the railway. It would be the cheapest and best means of transporting the mails, and we believe that a contract could be reached for carrying them tri monthly at less than one-half what is paid by the Government to the Panama mail steamer."

The resolution after expressing faith in the practicability of the proposed enterprise, reads as follows:

Resolved, that regarding the road by this route as a national military and mail road conducive to the interest of the whole country, we believe that the Government possess the constitutional power to improve it.

Resolved, That our Senators and Representatives in the Congress of the United States be requested to use their utmost endeavors to establish the said tri-monthly mail coach line, and to procure an appropriation to improve said road."

<sup>14</sup> James Lassitor owned a ranch at Green Valley in the Cuyamaca Mountains and operated a store and hay station for military trains and immigrants at Vallecito. He grew hay and cut wild oats in Green Valley which he hauled to Vallecito down the Oriflamme canyon trail (Porade 1963; Wray 2000).

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<sup>15</sup> One of the better documented attacks on a stage station occurred at Dragoon Springs on September 8, 1858, when Silas St. John and two or three other employees were attacked by Mexican Bandits who had also been working on construction of the stage station. St. John's companions were killed. His arm was badly cut and he lay for several days until help arrived. His wounded arm had to be amputated. St. John had been an early employee of the San Antonio and San Diego line, and carried the first mail between Carrizo and Fort Yuma in 32 hours (Conkling and Conkling 1947:145-147).

<sup>16</sup> At first Isaiah Woods hoped that the Oriflamme Canyon trail could be improved so that coaches could travel this way and bypass Warner's Ranch. An article in the San Diego Herald of September 19, 1857 noted:

#### The New Road to the Desert

The stage conductor of the overland mail train, on this end of the route, left here on Sunday afternoon, accompanied by Judge Morse and several other citizens to examine the new route to the Desert, with a view to take their coach train over that road on the 9th of next month. As this road cuts off one day travel between this place and Carrizo Creek, we suppose it will be for the interest of the Stage Company to join with the citizens and complete the improvements already projected, when it will be one of the finest roads in the county. . . when this is done, we may confidently expect a through mail, (in coaches) regularly in 28 days.

P. S. The expedition sent out by the Stage Company to examine the various trails in the immediate neighborhood of Cariso Creek, returned last night, they report passing over and returning by an excellent trail following which a road can be made at a very moderate expense in a distance of seventy five miles from San Diego to the Desert at Cariso.

In the present state of this trail, the Stage Company estimate that they can take the mail from here to Fort Yuma in 2 1/2 days, by crossing the mountains at the point examined, which is nearly due east of San Diego. A glance at the map will show the cut off which this makes when compared with the old road via "Warner's Ranch."

<sup>17</sup> The Carrillo family lived in the presently existing adobe ranch house at Warner's ranch from 1857 to around 1868 (Van Wormer 1998, Flanigan 1996).

<sup>18</sup> Strahlmann collection quoted from Texas Almanac of 1860).

## *Chapter 4: Archaeological Field Methods*

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After the turn of the century, the site of the Carrizo Stage Station became a historic curiosity occasionally visited by backcountry tourists, cattle drovers, and history buffs. Although several visitors photographed the adobe site in the late nineteenth century and early 1900s, the ruin was virtually unrecognizable by the mid-twentieth century (Figure 15 and Figure 16; also see Figure 1a and Figure 13a). Grading of the area for a pasture in the 1950s finally removed all above-ground vestiges of the former structure with the exception of a low mound on the creek terrace. The stage station was reduced to a memory recalled by a small California State Parks sign identifying the location. In the mid-1970s, Hurricane Kathleen cut a new creek channel along the east side of the low mound, exposing what appeared to be foundation stones. In the early 1980s, water also cut through a dirt berm on the west side of the mound, creating an east-flowing erosional gully through the site. While water damage continued to expose unidentified remains, it wasn't until 20 years later that State Parks was successful in funding an archaeological exploration and subsequent data recovery effort. That archaeological investigation is documented in the remainder of this report.

Archaeological excavation occurred in several field sessions conducted in the spring, fall, and winter months between April, 2001, and March, 2002. An initial test program, guided by a research design, was undertaken to determine what remains existed at the site and how they could most appropriately be protected from future damage. The test program excavations discovered that indeed approximately fifty percent of the structure's footprint remained as subsurface archaeological remains. The test program also concluded that a data recovery program would be the only way to preserve the site materials from destruction by natural and human damages (Wade et al. 2001). This data recovery program was implemented six months later and resulted in the complete excavation of the stage station structure, excavations on the structure exterior, and excavation of a trash pit.

To begin, a site datum was established at the northeast corner of what appeared to be a cobble foundation alignment, where it had been exposed by water erosion, along the eastern edge of the adobe mound. All unit and trench locations were measured according to the distance of the unit northeast corner from this datum on a 40-degree axis. To ease excavation



(a) "Carrizo Stage Station Ruins," 1928, view to northeast  
(by W.O. Garner, courtesy of the Garner family).



(b) Carrizo Stage Station Site, 2001, view to northeast (by California State Parks).

Figure 15. Carrizo Stage Station Ruins, 1928, and Site, 2001.

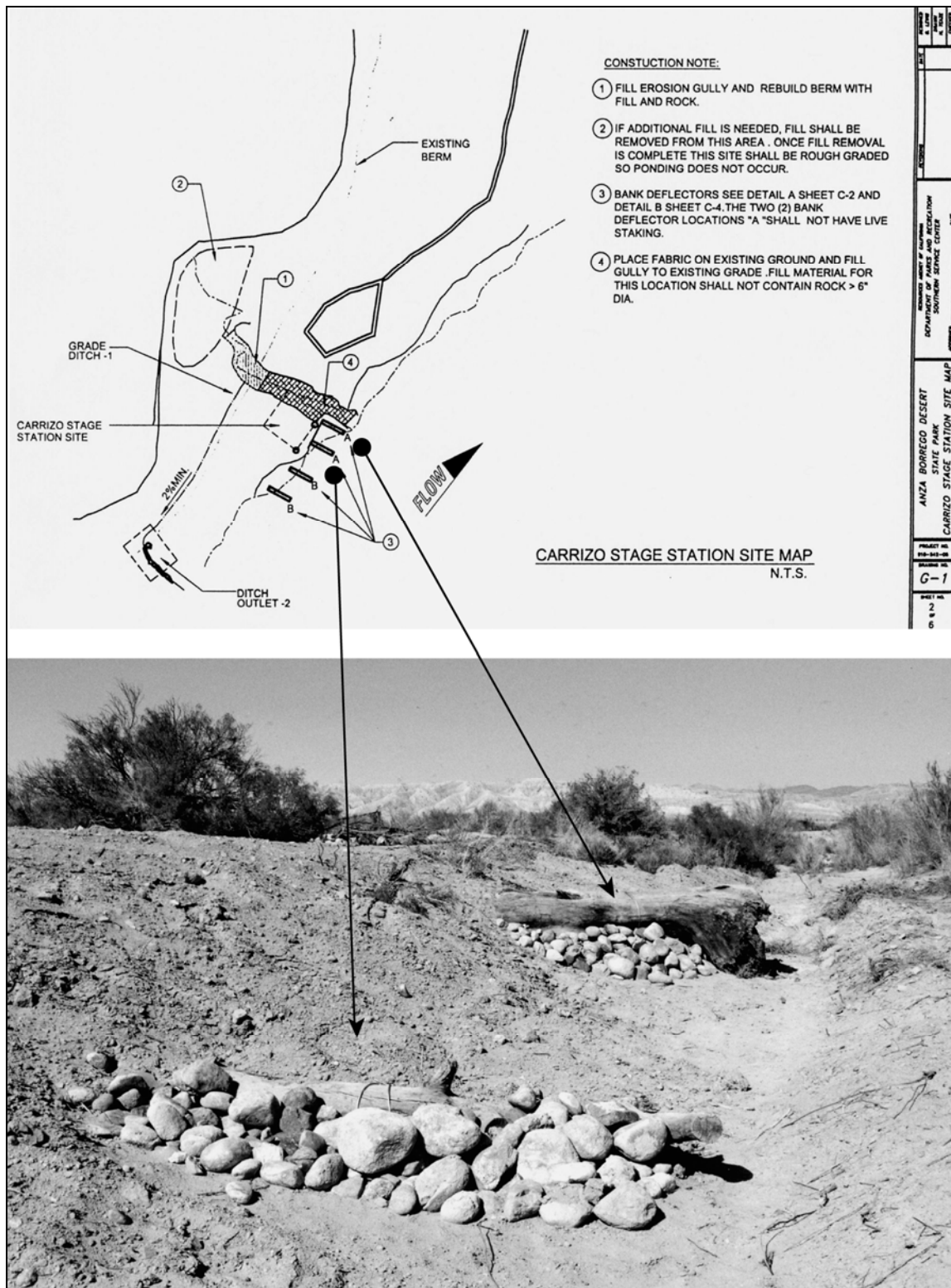


*(a) "Carrizo Stage Station Ruins," 1928, view to southeast  
(by W.O. Garner, courtesy of the Garner family).*



*(b) Carrizo Stage Station Site, 2002, view to southeast (by California State Parks).*

**Figure 16. Carrizo Stage Station Ruins, 1928, and Site, 2002.**



*Carrizo Stage Station Site (a) Erosion Control Plan, 2002, and (b) Erosion Control Features, 2002 (both by California State Parks).*

Figure 17. Carrizo Stage Station Site Erosion Control Plan and Features, 2002.

descriptions, the 40-degree axis of the excavation grid was called “project north.” The excavation grid was divided in three-foot increments for the test excavations and six-foot increments for the data recovery excavations. All excavation was conducted in stratigraphic levels. The soil was passed through 1/8-inch mesh wire screens to retrieve artifacts.

In order to gain an understanding of the extent and nature of features and resources in the site, the initial test excavation work began with the excavation of 18-inch-wide exploratory trenches excavated in three-foot-long increments. These revealed the presence of adobe wall remnants, cobble foundations, and cobble and packed earthen floors within the mound on the south side of the erosional gully, and under the level graded area on the north side of the erosion gully. Once the extent of these features was determined, excavation continued utilizing six-foot square units. The work ultimately revealed the remains of three main structures designated A, B, and C, in the order that they were discovered, and an associated outbuilding and remains of a reuse pit.

At the completion of the data recovery program, the structural remains were covered with loose-weave geo-textile fabric. The remains were then back filled by hand. An approximately three-to-five-foot-deep soil cap was deposited across the site using a rubber tired mechanical loader. Erosion control structures and re-contouring of the surrounding topography (designed for the site by a State Parks engineer) were implemented to drain future storm water away from the mound (see Figure 17).





# *Chapter 5: Research Design and Artifact Analysis Methods*

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## **RESEARCH ISSUES**

The archaeological research program was directed at characterizing and recovering the remains at the Carrizo Creek Stage Station site in order to preserve the information contained at the site and to acquire essential information for developing preservation and interpretation plans. Specifically, the excavation and analysis program focused on the following research issues:

### **Structure Remains and Features**

- What archaeological features remain at each structure?
- Can their original use be determined?
- Can their period of construction and use be identified?

### **Artifact Deposits**

- What artifacts remain at each feature?
- Can their period of deposition/use be identified?
- What can the resources tell us about domestic lifestyles in terms of economic and social activities?
- What comparative relationships between other archaeological collections in Southern California can be demonstrated for the middle of the 19th century?

### **Site Significance and Preservation**

- Do any identified remaining features represent significant archaeological resources?
- Do any identified artifact deposits represent significant archaeological resources?
- What impacts have occurred to significant archaeological deposits?
- What recurring or new impacts to significant resources are likely to occur in the future?
- What are appropriate preservation and interpretation strategies for identified significant archaeological features?
- What measures can be taken to protect the sites or to mitigate these impacts?

The data recovered as directed by the above research goals was combined with the archival research data to identify and describe 1) site function and evolution, 2) architectural methods and traditions, and 3) ethnic, social, and economic influences at the Carrizo Stage Station site.

## **ARTIFACT ANALYSIS THEORETICAL BACKGROUND**

The research objectives and analyses for the artifacts recovered from the Carrizo Stage Station site are framed within a theoretical context of functional pattern definition and studies of consumerism. Functional pattern recognition and consumerism studies provide a background appropriate for the analysis of various aspects of human behavior during the nineteenth and early twentieth centuries. These approaches are particularly well suited to large collections and to the analysis of dump materials. Essentially both orientations rely on a systematic approach to material culture studies as opposed to a particularistic one.

The purpose of historic artifact analysis is not to reconstruct the past through detailed artifact descriptions or to pay tribute to some notable historic event or person, but to reveal broad trends and patterns that can expand our understanding of the cultural processes that affected the lives of people during earlier times. The focus is on identifying and explaining the differences in the relationships between groups of people and the larger culture.

Based on methods developed by Stanley South and others, one of the ways that this type of understanding can be accomplished is through pattern analysis, which allows the historical archaeologist to develop functional artifact patterns or profiles (South 1977). To develop a site activity profile, artifacts are divided into functional categories or groups. Articles in each group are next quantified by estimated minimum number, and the amount converted into a percent of the total minimum number of items for each deposit. The resulting percentages for each group define relationships between activities that occurred on the site and allow the detection of broad patterned regularities related to site function. Bulk items such as concrete, building items, brick fragments, window glass, and tile are generally too fragmented to allow for an accurate estimate of the minimum numbers. These artifact types are quantified by weight only (Van Wormer 1996).

This type of analysis allows for the detection of relationships between functionally defined artifact groups at a generalized level, allowing for the definition of broad patterns. Analysis at this level is intended to define functional patterned regularities before variation in the norm can be detected through cross-site comparison regularities (South 1977:110). South's classification system relies on eight artifact groups. However, an expanded system of 20 activity groups has proven more successful for various sites in Southern California and was used for this study (Van Wormer 1991, 1996; Van Wormer and Schaefer 1991; Phillips and Van Wormer 1991; Van Wormer and Gross 2006). These are listed and defined in Table 3.

Studies in consumer behavior indicate that people buy things for their cultural meaning, as well as for their functional purposes. Consumption is one of the important ways of signifying membership in a community unit, particularly in class, status, and ethnic groups, and therefore is an important reflection of lifestyle. Some units, known as reference groups, exert a greater dominance on an individual's values. Since individuals are influenced by the groups to which they belong, people can follow a group lifestyle. There will be variability in

the group lifestyle as practiced by its individual members, but there will be more similarity among individuals within a reference group than between groups (Henry 1991).

Table 3. Activity Groups Used in Artifact Pattern Analysis.

<b>CONSUMER ITEMS GROUP</b>	<b>PERSONAL ITEMS GROUP</b>
<i>Items containing products purchased and consumed on a regular basis</i>	<i>Belonging to a single individual</i>
Bottles	Eye glasses
Bottle caps, can lids, and related items	Jewelry
Jars	Musical instruments
Tin cans and other tins	Smoking pipes
<b>KITCHEN GROUP</b>	Toiletry items (comb, hairbrush, razor, toothbrush, etc.)
<i>Food preparation and serving</i>	Toys and gaming items
Butchered bone	Watches
Canning jars	<b>FURNITURE PARTS GROUP</b>
Canning jar lids and related items	<i>All furniture parts</i>
Ceramic kitchen and tableware	Bed and other furniture frames and springs
Cooking items	Cabinet hinges
Flatware	Drawer pulls
Glass tableware	Scroll trim
Jelly tumblers	Springs
Seeds	Trunk parts
Shellfish	Upholstery tacks
Stove parts	<b>HARDWARE GROUP</b>
<b>HOUSEHOLD ITEMS GROUP</b>	<i>Miscellaneous hardware not included in a specific group</i>
<i>Daily household maintenance</i>	Baling wire
Batteries	Bolts and nuts
Household ceramics	Chain links
Household glassware	Cotter pins
Lamp parts	Metal bands and strapping
Light bulbs	Rivets
Medical items	Screws
Miscellaneous household items	Washers
<b>GARMENT ITEMS GROUP</b>	Wire fencing
<i>All clothing items</i>	<b>TOOLS GROUP</b>
Buckles	<i>All hand tools</i>
Buttons	Artist's tools
Clothing rivets	Carpenter's tools
Collar stays	Gardener's tools
Corset Hardware	Jeweler's tools
Garter clasps	Mason's tools
Hook and eyes	Mechanic's tools
Shoe parts	Other miscellaneous hand tools
Snaps	<b>COINS GROUP</b>
Straight pins	<i>All coinage and tokens</i>
Strap slides	
Suspender clasps	

Table 3. Activity Groups Used in Artifact Pattern Analysis *continued*.

<b>LIVERY ITEMS GROUP</b>	<b>OTHER OCCUPATIONS GROUP</b>
<i>Horse and horse-drawn vehicle items</i>	<i>Specialized occupation items</i>
Bridle parts	Factory items
Buggy parts	Farmstead items
Harness parts	Mining items
Horse shoes and nails	<b>UNIQUE ITEMS GROUP</b>
Saddle parts	<i>Items not included in other groups</i>
Wagon parts	<b>UNIDENTIFIED ITEMS GROUP</b>
<b>MUNITIONS ITEMS GROUP</b>	<i>Items that cannot be identified</i>
<i>All firearms and related items</i>	<b>INTRUSIVE ITEMS GROUP</b>
Bullets, cartridges, musket balls, and gun parts	<i>Items intrusive to a discrete dated deposit</i>
<b>BUILDING MATERIALS AND ARCHITECTURE GROUP</b>	<b>MACHINERY ITEMS GROUP</b>
Asphalt	<i>All machine parts except agricultural implements</i>
Ceramic drain pipe	<b>FORGE MATERIALS GROUP</b>
Ceramic flue lining	<i>All forge, furnace, and stove wastes</i>
Concrete	Coal, clinkers, and slag
Construction hardware	<b>AGRICULTURAL IMPLEMENTS GROUP</b>
Construction materials	<i>All farm machinery</i>
Counter glass	Chain belting
Door locks and parts	Cultivator parts
Electrical hardware	Harrow parts
Nails and spikes	Hay rake parts
Plaster	Manure spreader parts
Window glass	Mower parts
	Plow parts
	Threshing machine parts

With this approach, archaeological refuse deposits provide information regarding the definition of specific behavior patterns; what has been defined as consumerism. Trash-filled privies, wells, and pits often contain artifact assemblages representing small, temporally and spatially distinct patterns of specific households. A neighborhood dump should define a somewhat larger pattern, and a municipal dump, a still larger unit of comparison (Dickens and Crimmins 1982:106).

Archaeological studies of consumerism attempt to define pattern differences that may be the result of socioeconomic status, ethnicity, household structure and lifestyle, and market access, as well as demonstrating the biases that may be present in the archaeological and documentary records. Archaeological research on consumer behavior has demonstrated a strong relationship between economic roles, social stratification, and the types of material culture owned by households as these social phenomena are represented by the artifacts and ecofacts excavated from sites (Spencer-Wood 1987a:1-3). This means that certain items will be found in an assemblage because the existing cultural patterns have determined that they are meaningful or important. For example, the presence of both every day and special occasion dishes, utensils and serving pieces occurs in many households. Consumerism is one of the important ways that people signify their membership in a group, in particular how they see themselves within a class, their status ranking, or their ethnic group identification. For this reason consumerism is a meaningful reflection of lifestyle.

The study of consumer behavior requires a comparative database so that the patterns that characterize various social classes, ethnic groups, historical periods, and geographical regions can be compared (Lee Decker 1991). The primary cultural unit of comparison for historic archaeology has traditionally been the household, which is defined as a “domestic residential group consisting of the inhabitants of a dwelling or set of dwellings and appears as a discrete group in historic documents” (Henry 1987a, 1987b). The household, then, includes all the residents in the group that could have contributed to primary artifact deposits within the premises’ yard or another defined boundary during a single time period (Spencer-Wood 1987a:2). These deposits are generally classified as privies, wells, or household dumps.

Households combine to form two larger reference groups: social class and ethnic group. This commonality of group membership allows for the comparison of large numbers of households in a consistent manner (Henry 1987a, 1987b). If a sufficient database has been developed, research can focus on analytical units, larger than a single site, making comparisons (intersite) within and between social groups possible (Henry 1987a). Intersite comparisons are used to assess the range of variation, which may be present between groups and between households to help define shared group behaviors (Spencer-Wood 1987a:7-8). In part the definition of these groups, as it is based on material culture, requires that a “value” scale be developed to allow for this stratification. Several procedures have been developed to study consumerism and the relative values that different groups placed on certain artifact classes. These methods include economic indexing and consumption pattern analysis.

Economic indexing was first developed by George L. Miller for ceramic tableware. The scaling is based on indices developed from the cost relationships of tableware form and decoration during specific time periods (Miller 1980). Analytical methods based on Miller’s work have been refined to develop consumer choice profiles (Spencer-Wood and Heberling 1987; Spencer-Wood 1987b). Indices have also been developed by Henry for twentieth century ceramic assemblages (Henry 1982, 1987b) and similar indices have been used for butchered bone and fish remains (Schulz and Gust 1983; Huelsbeck 1991; Singer 1987). Consumption pattern analysis focuses on bottled products consumption patterns, which have proven useful to define site function and social or reference group affiliation. Relative frequencies of bottled products differ between domestic households and commercial establishments as well as between social groups (Van Wormer 1983a, 1991, 1996; Blanford 1987).

Artifacts from the Carrizo Stage Station represent culturally biased consumer behavior of the household members that occupied the premises. By applying the analytical techniques described above, it will be possible to identify which reference group they represented.

## **ARTIFACT ANALYSIS AND CATALOGING PROCEDURES**

The artifactual material recovered was cleaned and identifiable items cataloged according to activity group, material, item, type, product, technology, origin, size, pattern, identifying marks, manufacturer, date, estimated minimum number of individual items represented, and weight. This information was used to conduct analysis of functional artifact patterning, bottled products consumption patterns, and ceramic economic scaling which will be used to answer the research questions proposed above. The artifact catalog is included with this report as Attachment I.



## Chapter 6. Results

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### STRUCTURE HISTORY

Although covered in the historic background section, the known historical documentation of the stage station will be summarized here. The first mention of a building at Carrizo Creek is on June 3, 1855, two years before implementation of the Overland Mail Service, when Charles H. Poole, Chief Engineer with the Pacific Railroad Survey, reported “the storekeeper inhabiting the adobe house, newly built at camp, informed us that; for the eight months previous to our visit, it had not rained but once, and then for eight hours heavily...” This “newly built adobe house” soon became more than just an isolated desert post. In a little over two years it would become an important station on the first overland transcontinental mail service.

The station at Carrizo Creek became a vital link in the San Antonio—San Diego Mail line. It functioned as one of seven major stations west of the Rio Grande. Here passengers disembarked to change coaches. At Carrizo Creek they left the eastbound stage from San Diego and boarded another that ran between Carrizo and Fort Yuma (Woods 1858). It is assumed that the stage from San Diego remained at the station until the other returned with westbound passengers that had boarded in Yuma. I. C. Woods reported that the company had “two hundred head of mules west of the Rio Grande, stationed at San Diego, Carissa Creek, Fort Yuma, Petermans, Maricopa Wells, Tucson, and La Mesilla. At each of these places agencies or stations had been established with abundant supplies of grain everywhere. We feed corn to all our working mules.” Hay was delivered to the station from Green Valley in the Cuyamaca Mountains, under contract with James Lassitor (Woods 1858).

Based on the few ephemeral and brief descriptions that exist, the station appears to have been a small adobe building with a thatch roof that was not covered over with mud. J. J. Thomas saw Carrizo Creek Station in the fall of 1857 as an “old adobe house,” occupied by William Mailland. The thatch roof had been burned off (*Sacramento Union* 12-24-1857). After Mailland murdered his wife, Major Ringold found him locked inside with two Indians at the “barricaded door” (*San Diego Herald* 5-29-1858). This would suggest that the building had a wooden door and that by this time the roof may have been re-thatched. If it did have any windows they were too small for Mailland’s adversaries to climb through.

Under administration by Butterfield's Overland Mail Company, Carrizo Creek functioned as a changing or "swing" station to replace worn out teams with fresh horses. In 1860, the single station keeper was William Yates, identified as a hostler, who took care of the livestock and helped change the teams. He kept five horses and 12 tons of hay and barley. The Butterfield Company's investment in the station was 1,200 dollars (US Census Bureau 1860a, 1860b). Passengers in their brief descriptions did not leave details of the buildings. They were more impressed with the location, commenting on the "water still more sulphurous in its taste" (Farwell 1858; *Alta California* 11-6-1858) or a "a solitary station in a scene of desolation not to be surpassed in the Arabian deserts" (Tallack 1860).

When James Russling saw the building after the Civil War, in February, 1867, he described it as "the adobe remains of an old stage station, whose roof was all gone, and as a substitute the enterprising proprietor had thrown some poles across, and covered them with willows and coarse grass..." The "forlorn structure, part of which was used for a chicken-roost, also served its owner as bar-room, grocery, kitchen, parlor, bed-room, etc., and yet contained only one rude apartment, altogether" (Russling 1877:349). Russling probably erred in believing the station had ever been covered by anything but a loosely thatched roof.

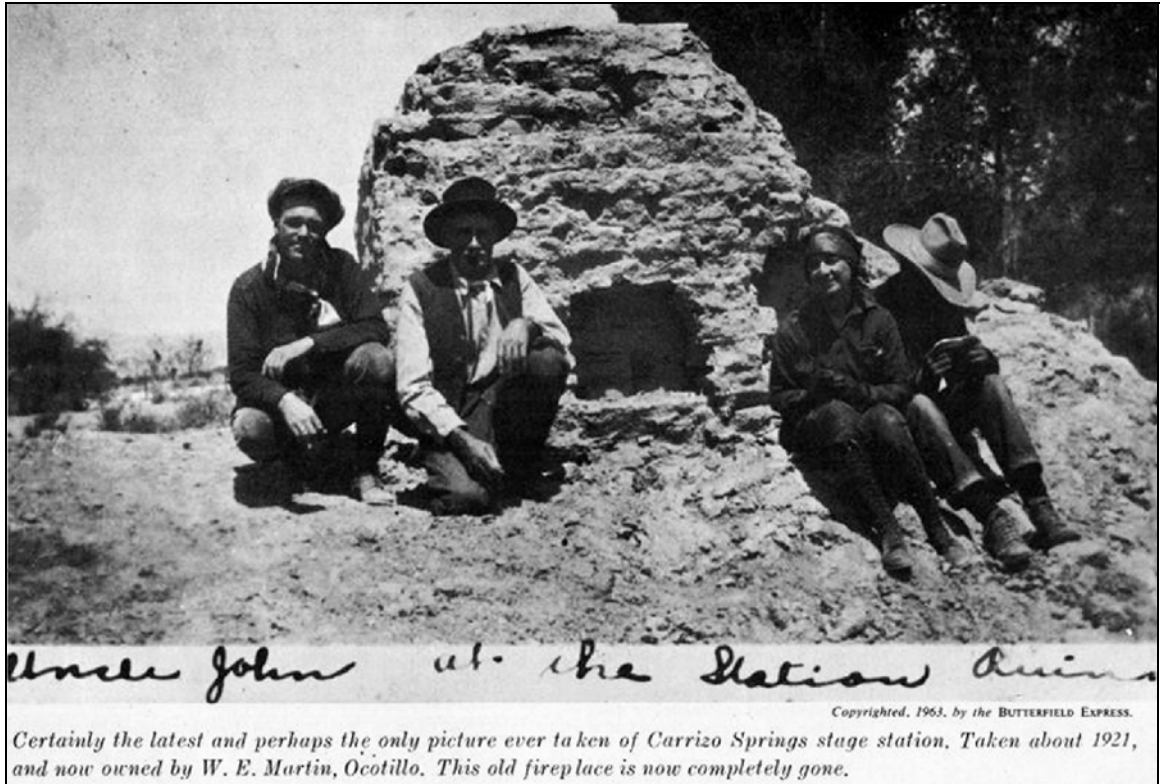
Following completion of the Southern Pacific Railroad line between Yuma and Los Angeles, the building was abandoned and fell into ruin. When photographer Edward H. Davis saw the station in 1896 "it was almost a complete ruin.... I did not consider it worth taking a photo of. Some of the adobe walls were standing, but mostly washed away—no roof, no posts, no rafters. It was located on a mound on the east bank of Carrizo Creek" (Davis 1935). Photographs from this period show the ruins consisting of fallen and melted adobe wall stumps. A fireplace chimney at the southeast corner of the building became the site's most prominent feature and could still be recognized into the 1930s (see Figure 4a, Figure 13a, Figure 15a, and Figure 16a).

Around 1900, local cattle ranchers, the McCains, established a winter camp at the old stage station location on Carrizo Creek (Figure 18). They built corrals and a small adobe house. A photograph shows remains of this building approximately 20 yards north of the station ruins (see Figure 15a). In the mid-1920s, Butterfield Mail historians Roscoe and Margaret Conkling visited the site and recorded: "The station quarters comprised a large adobe building, approximately 48 feet square and probably contained four rooms with an open hall between. The adobe walled corral adjoining was approximately 60 by 50 feet" (Conkling and Conkling 1947:227). Around 1958 the McCains severely impacted the ruins.

The events are described in an undated letter written by Mrs. Buster McCain found in the abandoned Carrizo Creek homestead in the 1960s:

Yesterday the final remains of the old Carrizo Stage Station vanished. Though maps still show it as an historical monument there has been nothing more than a small mound of adobe for years. We turn dozens of cars of sightseers away every winter who have traveled miles over awful roads to see this station the maps claim still stands. Now even the mound is gone. Buster leveled it off with the tractor and made it part of what will be a small pasture. On the bottom of the little heap of dirt he uncovered three perfect adobe bricks and the entire foundation which was, to my astonishment, made of large rocks, and the adobe floor. That much had been protected. [McCain 1958]





(a) "Uncle John at the Station Ruins," circa 1921, view to northeast  
 (from *Butterfield Express, Historical Newspaper of the Great Southwest*, February 1964).



(b) McCain-era Livestock Corrals North of the Carrizo Stage Station Site, 2003, view to the southeast  
 (by California State Parks).

Figure 18. Uncle John at Ruins, 1921, and McCains and McCains Corral, 2003.

In “leveling off” the adobe mound, Buster McCain built an earthen dike that ran along the base of the mesa, approximately ten feet to the west of the building site, in order to form a reservoir to irrigate his “small pasture.” Fortunately, he only impacted the north half of the site and the southern portion of the adobe mound remained intact. His work would have further destructive results in later decades. In the 1970s Hurricane Kathleen sent a torrent of water surging down Carrizo Creek and cut a small stream channel on the east side of the building, exposing foundation cobbles. In the early 1980s, the earthen dike built more than 20 years earlier overflowed, cutting a large erosional channel through the center of the stage station site.

## **STRUCTURES, FEATURES, AND STRATIGRAPHY**

Excavations at Carrizo Stage Station revealed remains of three buildings and a number of related features (Figure 19). The southernmost was designated Structure A. Structure B remnants lie approximately seven feet north of and parallel to Structure A. Both of these adobe construction ruins measured approximately 30 feet east-west by 18 feet north-south. A narrow seven-foot-wide open hallway originally ran between them. The remains of Structure C underlie B and consist of the vestiges of a wattle and daub building and associated features. Features B1 and B2 represented the burned remains of additional small wooden outbuildings. Features A1, A2, and B4 were refuse deposits contemporary with the Overland Mail period (1857-1861). A large erosional channel, running through the center of the site, formed when Buster McCains’ earthen dike overflowed in the early 1980s and destroyed portions of all structure ruins and some of the features. This summary will describe the chronological sequence of the site’s major features and stratigraphic units listed in Table 4. More detailed discussions will be provided as each structure and feature is individually described.

The site contained two types of sub-soils. Fine windblown sandy silt, that may have originally been a small stabilized dune, underlies the southern portion of the site below Structure A. The base soils of the northern half, under Structures B and C, consisted of a

Table 4. Chronological Order of Major Structures, Features, and Stratigraphic Units.

<b>STRUCTURES, FEATURES, UNITS</b>	<b>TIME PERIOD</b>
Loose Fine Sandy Silt Overburden	1958-2002
Earthen Dike Berm – Graded Overburden Over Structure B	Circa 1958
Feature B3	1880-1914
Adobe Melt Overburdens – Brown Sandy Loam Overburdens	1880-1914
Structure B – Feature B1	1857-Circa 1880
Structure C	Circa 1857-1861
Feature B2 – Structure D	Circa 1857-1861
Features A1, A2, and B 4	1857-1861
Structure A	1855-Circa 1880
Sub-soils	n/a



*Schematic Drawing of Carrizo Stage Station Structures and Features, April 2003, superimposed on aerial photograph (drawing by Bonnie Bruce, photograph by California State Parks).*

**Figure 19. Schematic Drawing, 2003, Overlain on Aerial Photograph.**

The conclusion that Feature B4 is associated with Structure A is based on its stratigraphic relationship with the remaining features, which indicates it was abandoned and covered over when the other buildings were constructed. Feature B2, a dense ash lens representing a burned wooden structure immediately west of Structure B, overlies approximately 12 inches of water-deposited sediments that cap Feature B4, indicating it was built and later burned after the trash pit had been abandoned and closed. The ash lens of Feature B2 has, in turn, been bisected by a wall trench of Structure C, which shows that Structure C was built after Feature B2 burned. Overlying Structure C was the remains of the second adobe building, Structure B, which obviously demonstrated that it was the last in the sequence to be built. Since the buildings represented by Feature B2, Structure C, and Structure B date after the Feature B4 trash pit was covered over, the logical source for this refuse is the occupants of Structure A.

Adobe melt and building debris, which resulted from its abandonment and deterioration, covered Structure A. Wind-deposited sandy silt lay on top of the melt and rubble on some parts of the ruin mound. Structure B was covered with a thin lens of adobe melt, left after the site had been graded in 1958. The other features and the area surrounding Structure B were covered with adobe melt and brown sandy loam overburdens containing late nineteenth and early twentieth century artifacts, including sun colored amethyst glass and machine-made bottles indicating a deposition range circa 1880 to 1914. These appear to represent late nineteenth and early twentieth century winter occupation of the site by cattle ranchers. Feature B3, a thin ash lens overlaying the strata covering Feature B4, also dated from this period. The extreme western portion of the site is covered by the large earthen dike constructed by Buster McCain in 1958. The top layer of soil surrounding the adobe melt mound of Structure A, and on the northern portion of the site above Structure B, is a loose fine sand silt. This layer was water-deposited overburden that had accumulated since the dike was built. Structures and features will now be discussed individually in chronological order.

## **Structure A**

Structure A was a two room, rectangular adobe building that measured 30 feet east-west, by 18 feet north-south. A single adobe block interior dividing wall separated the dwelling into two rooms. This partition is not square with the rest of the building's floor plan, but angles slightly from the southeast to the northwest. Consequently the room measurements are not consistent from north to south. The west room measured approximately seven by six feet and the east room five by six feet (Figure 20).

*Condition and Stratigraphy:* Prior to excavation, Structure A consisted of a small adobe mound approximately 24 to 30 inches high, covering an area of 25 by 35 feet. Along the eastern edge, erosion had exposed an alignment of foundation cobbles (Figure 21a). Excavation revealed remnant adobe wall segments, cobble foundation alignments, sections of articulated wall fall, and floors constructed of small cobble pavements covered with silty clay. The erosional gully cutting through the site had impacted the northwest corner of the Structure A ruin and completely destroyed about 1/8 of the building's remains.

Stratigraphy inside the building varied slightly between the rooms. In the east room the original floor was covered with about three to four inches of a very level, light-to-pale brown silty sand. It appeared to be a wind-blown deposit. This was under a layer of burned silt and sand approximately four inches thick. Lenses of thatched roof fall were encountered

throughout this layer. Above this was a one-to-two-inch layer of goat manure, covered by two to four inches of light tan silt consisting of melted adobe wall material (Figure 22). In the west room a thin burn layer about two inches thick covered the floor. Above this was two to three inches of a silty sand, identical to that covering the floor in the east room. At the contact between the burn layer and the sand was a thin organic fibrous lens that may have represented decomposed roof thatching material. This was covered by 24 inches of semi-articulated wall fall in the southern three quarters of the room (Figure 23). Disarticulated adobe building rubble covered the wall fall and filled the remaining areas (Figure 24).

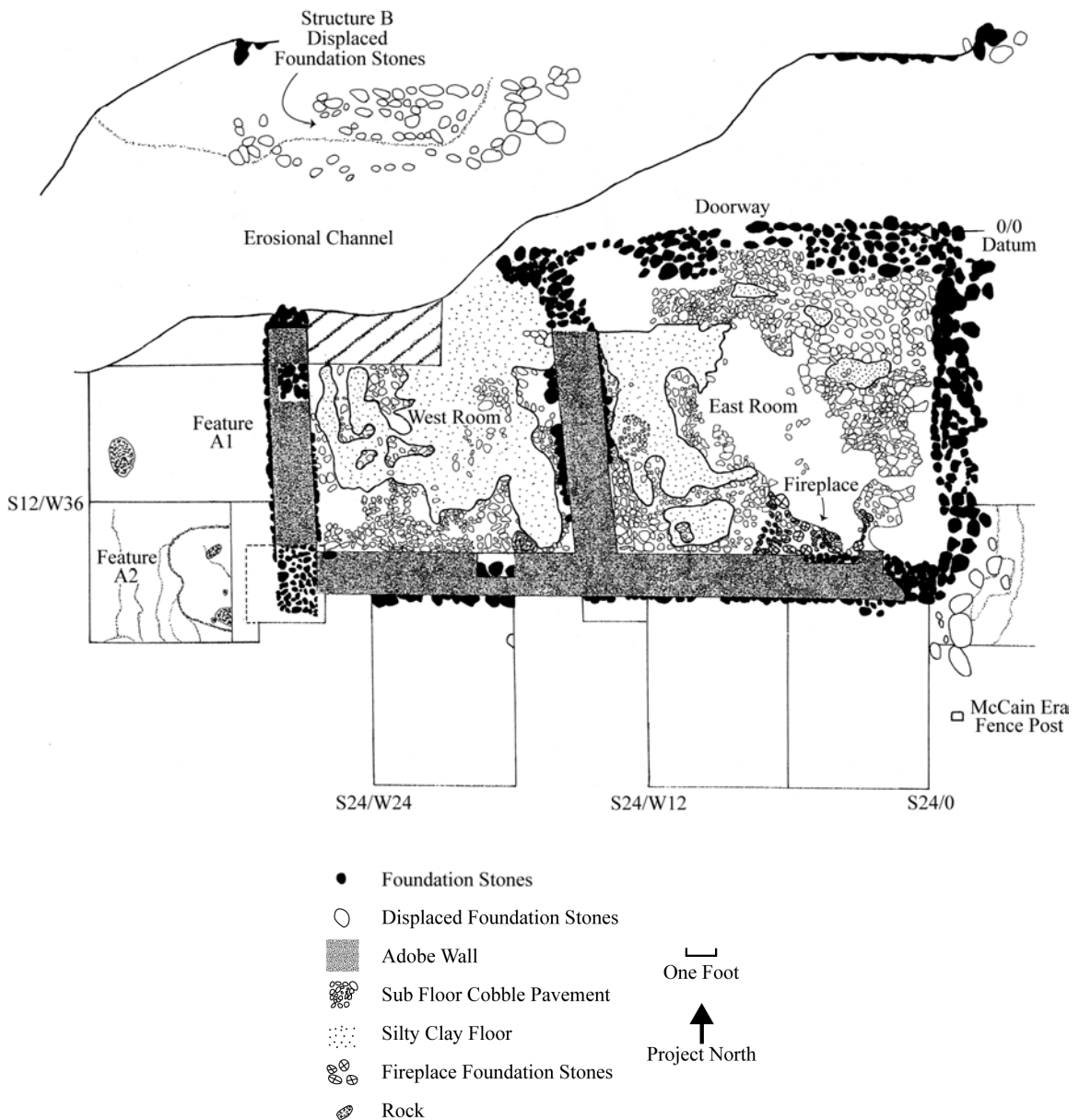
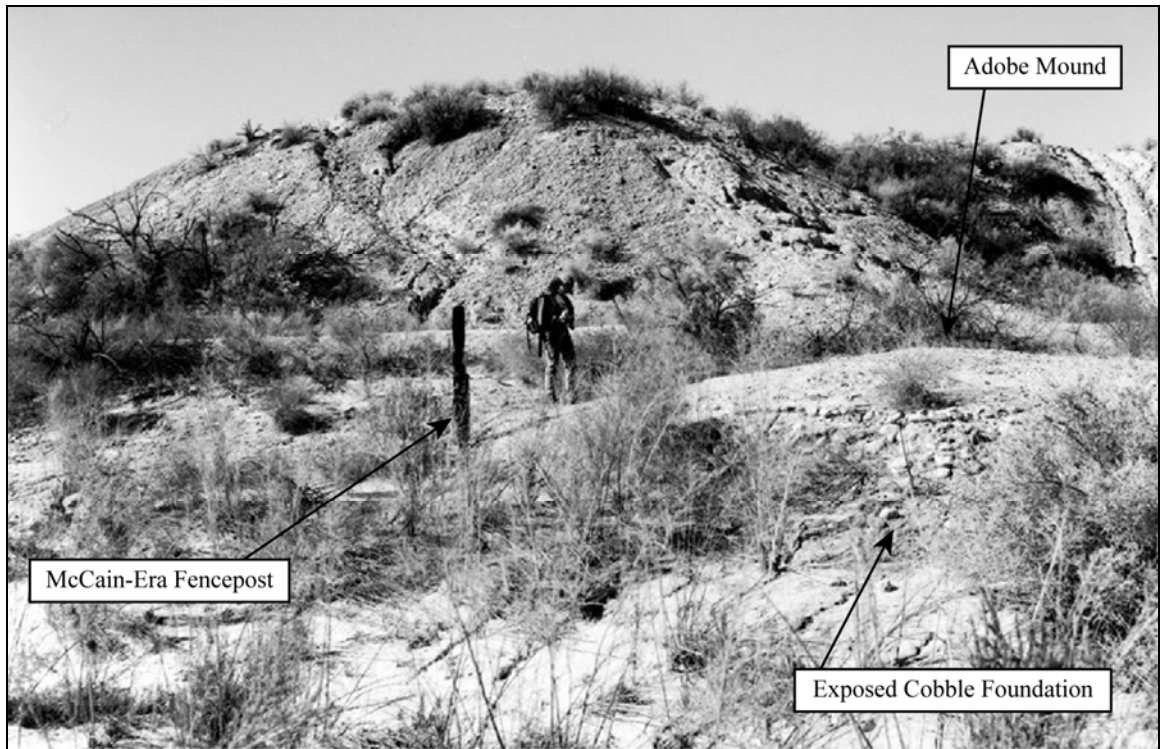
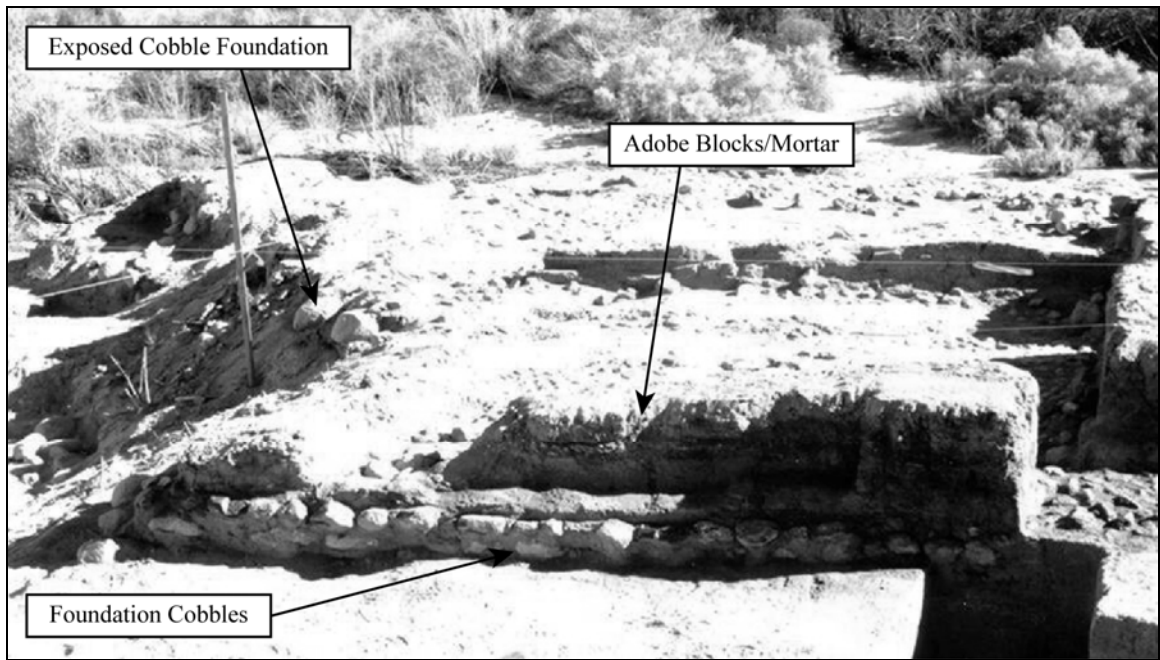


Figure 20. Structure A Archaeological Remains Site Map.



(a) Carrizo Stage Station Site, 1999, view to west (by Christopher Wray).



(b) Structure A, West Wall Detail, 2002, view to north-northeast (by California State Parks).

Figure 21. Carrizo Stage Station Site, 1999, and Structure A, 2002.

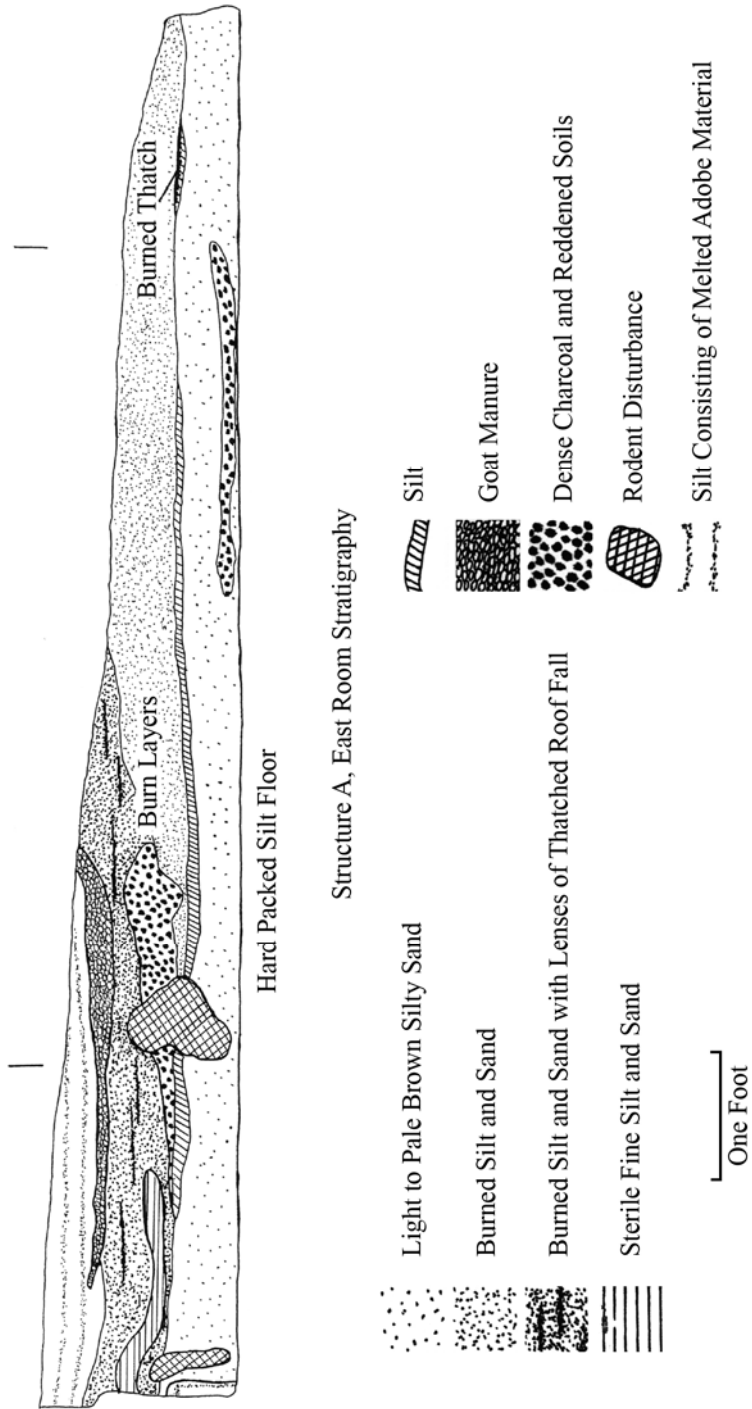


Figure 22. Structure A West Wall Profile of Units S0/W12, S6/W12, and S12/W12.



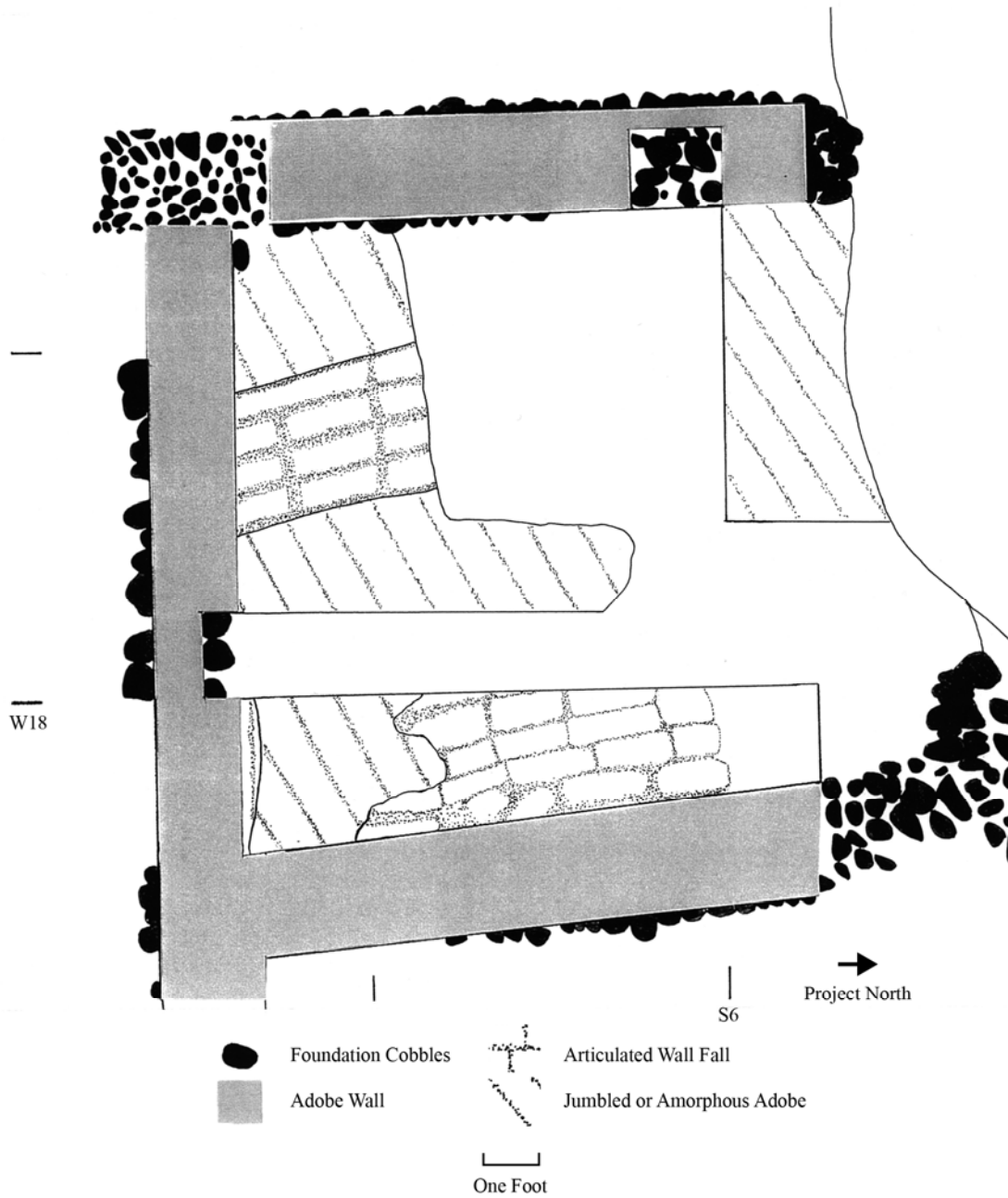


Figure 23. Structure A Plan View of Wall Fall in West Room.



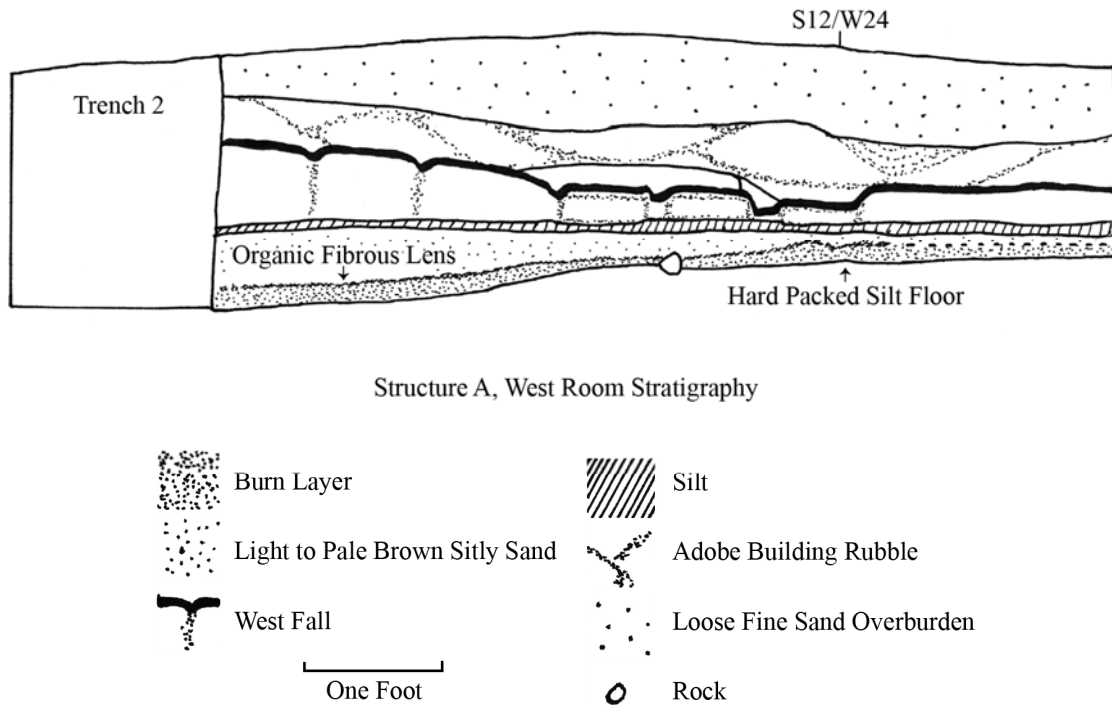
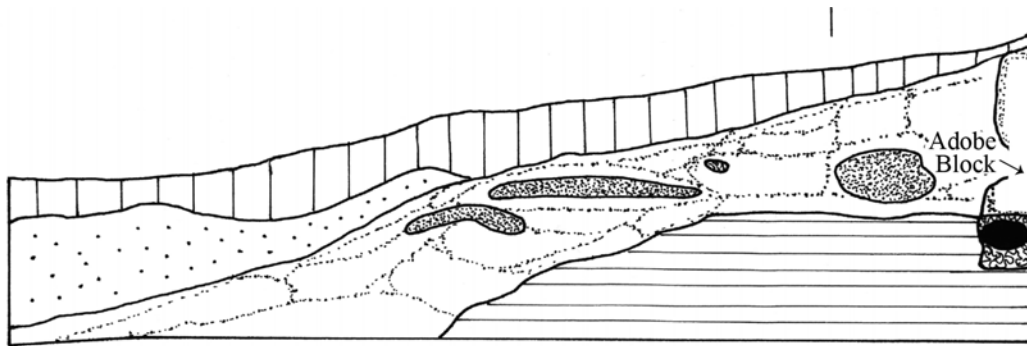


Figure 24. Structure A South Wall Profile of Units S6/W18 and S6/W24.

From the stratigraphy and historic photographs, the following general chronology of the deterioration of Structure A can be determined. For a time the building stood abandoned and unmaintained, allowing a layer of windblown sand two to three inches thick to accumulate on the floor. Near the end of this period the roof began to disintegrate and finally it burned, resulting in the roof fall encountered within the burn layer in the east room and the fine burned lens covering the floor with the fibrous organic layer in the west room. Sands continued to accumulate but without a cover the walls soon deteriorated and fell down, resulting in the articulated wall fall and building rubble in the west room and the light tan adobe melt that covered the entire mound. Finally, after the building had completely collapsed it was used as a goat corral, probably by the McCains.

*Foundations:* Exterior and interior foundations were constructed in an identical manner. They consisted of one to two courses of 6-to-8-inch diameter water-worn cobbles placed in alignments approximately 24 to 30 inches in width (see Figure 21b). On the east end of the building the cobbles were laid directly on the ground surface and mortared together with dark brown clay. Due to a slight rise in the terrain, foundations on the west wall and west end of south wall of the building were placed in a shallow trench (Figure 25 and Figure 26). The interior wall sits on a foundation identical in construction to the exterior walls.

*Walls:* Remains of adobe walls ranging from six to about 20 inches in height were found along the south and west exterior foundation alignments, in addition to the interior dividing wall that separated the building into east and west rooms. The interior wall is tied into the exterior, indicating that it was built at the same time as the rest of the building. The average size of the tan, silty loam adobe blocks appears to have been 12 x 24 x 4 inches,



Structure A, South Side Exterior Stratigraphy

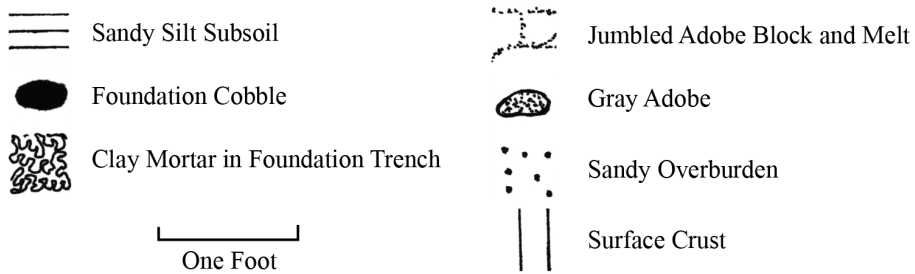
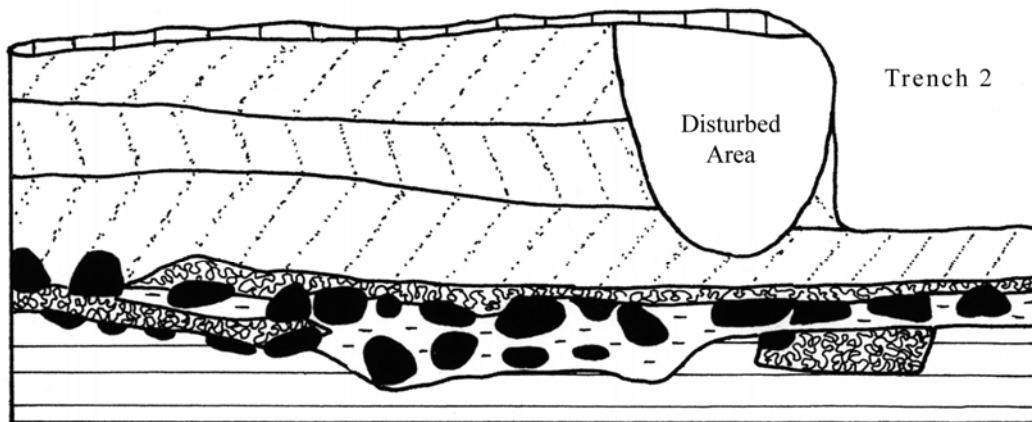


Figure 25. Structure A West Wall Profile of Units S12/W18 and S18/W18.



Structure A, South Wall Exterior

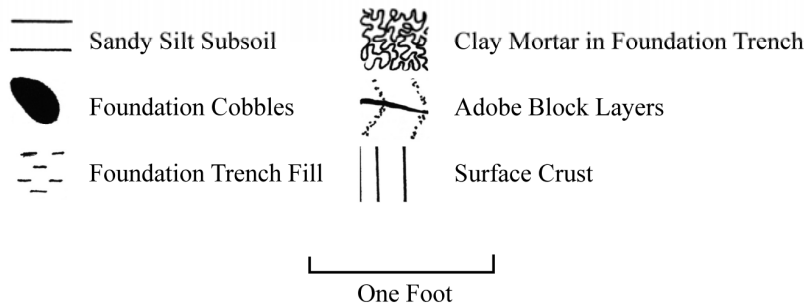


Figure 26. Structure A North Wall Profile of Unit S12/W18.

however block sizes varied slightly, and some were as long as 26 inches. To receive the blocks, the top of the cobblestone foundations was covered with a layer of dense clay approximately two inches thick. The bottom row of block was laid on this clay as a single header course across the foundations. The walls were then raised in alternating courses of two parallel 12-inch-wide stretcher bonds, and single rows of 24-inch-wide header bonds, with approximately one-inch-thick, dark reddish-brown clay mortar joints. In spite of the use of a dense clay mortar, joints between the blocks were difficult to define, especially in the upper courses where extreme weathering had occurred (Figure 27 and Figure 28a).

*Floors and Roof:* The interior floor consisted of a pavement of pebbles two to four inches in diameter, tightly packed over the entire surface of both rooms and against the interior edge of the adobe block walls. They were one to two inches higher than the foundation cobbles and placed in a dense, dark reddish-brown clay mortar similar to that

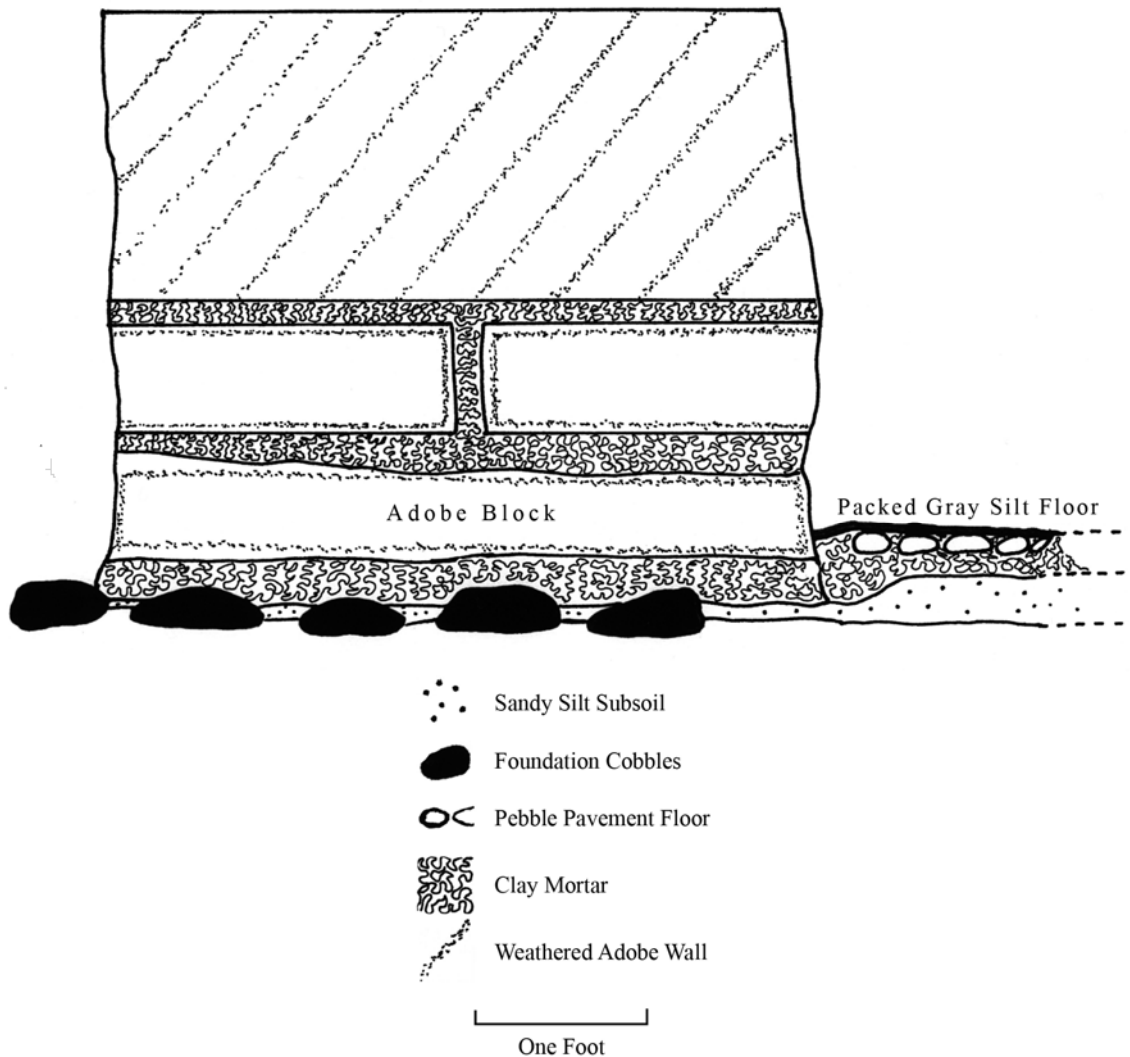
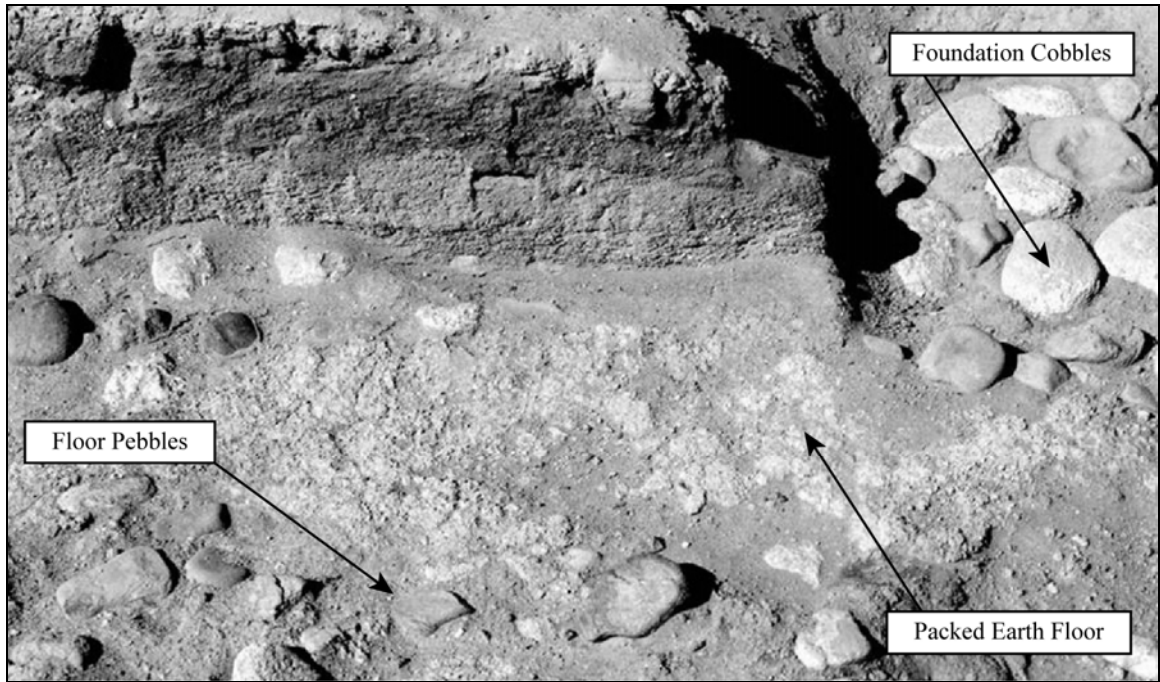


Figure 27. Structure A West Wall of Trench 2 Bisecting South Wall, Unit S12/W18.



(a) Structure A, Southwest Corner, 2001, view to northeast (by California State Parks).



(b) Structure A, Unit 6S/24W, 2002, view to northwest (by California State Parks).

Figure 28. Structure A Foundation Cobbles and Compacted Floor.

used to construct the walls. The pebbles were covered with a packed layer of gray clayey silt about half an inch thick (see Figure 28b). On the north wall, near the northeast corner of the building, a doorway could be detected where pebble floor pavers covered the foundation in a three-foot-wide rectangle. A six-inch space between the edge of this section and the edge of the foundation suggests a wooden door frame was placed here (Figure 29a; see Figure 20).

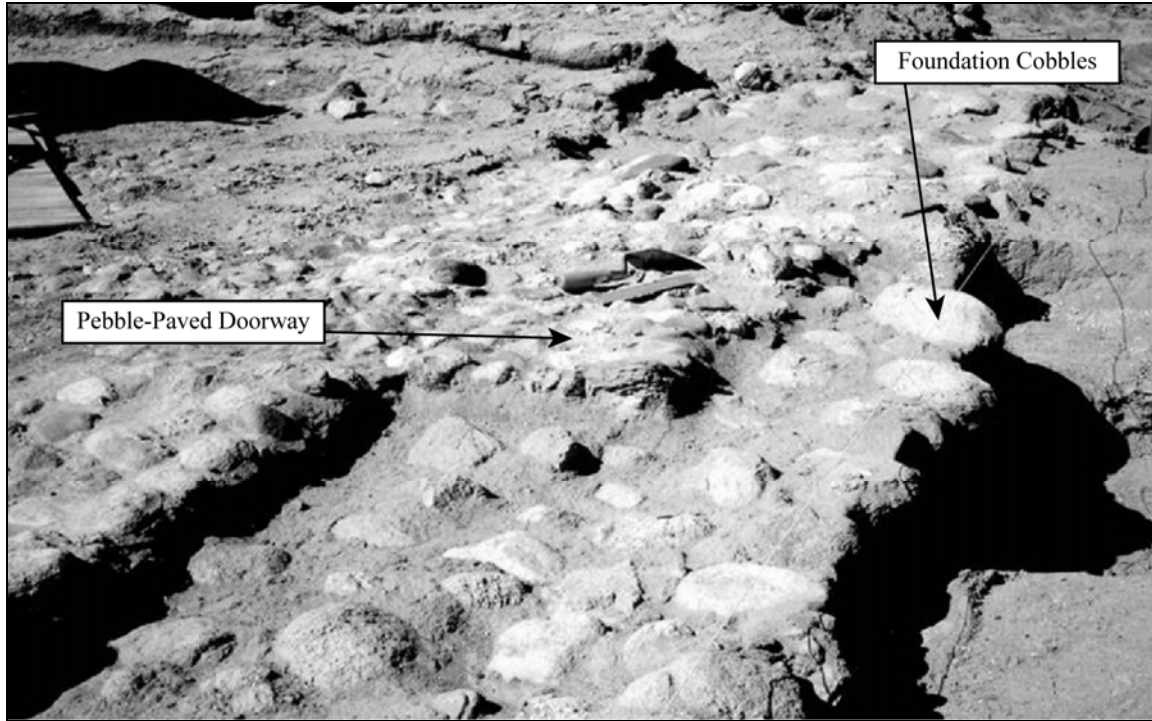
The floor has been highly disturbed in the center of the east room where cobbles have been removed, leaving an irregular shaped hole that measured approximately six by nine feet. At the southeast corner of the building the small floor pavement pebbles gave way to tightly packed 4-to-6-inch diameter cobbles. These appeared to have originally been placed in a rectangular pattern measuring approximately three by eight feet, and probably supported the fireplace that can be seen in historic photos of the ruins at this location. Unfortunately, this area had also been badly disturbed and many of the stones were missing.

Roof fall was encountered in the southwest corner of the east room. This consisted of burned and unburned sections of roof thatching, made up of small interwoven twigs varying from 1/8 to 1/4 inches in diameter. Associated with these were segments of burned limbs one to two inches in diameter that probably served as support pieces (Figure 29b). No evidence of mud or any other material covering the thatch was found. This complies with the stage station description by Russling in 1867, who saw the roof constructed of some poles thrown across the top of the building and covered with willows and coarse grass (Figure 30).

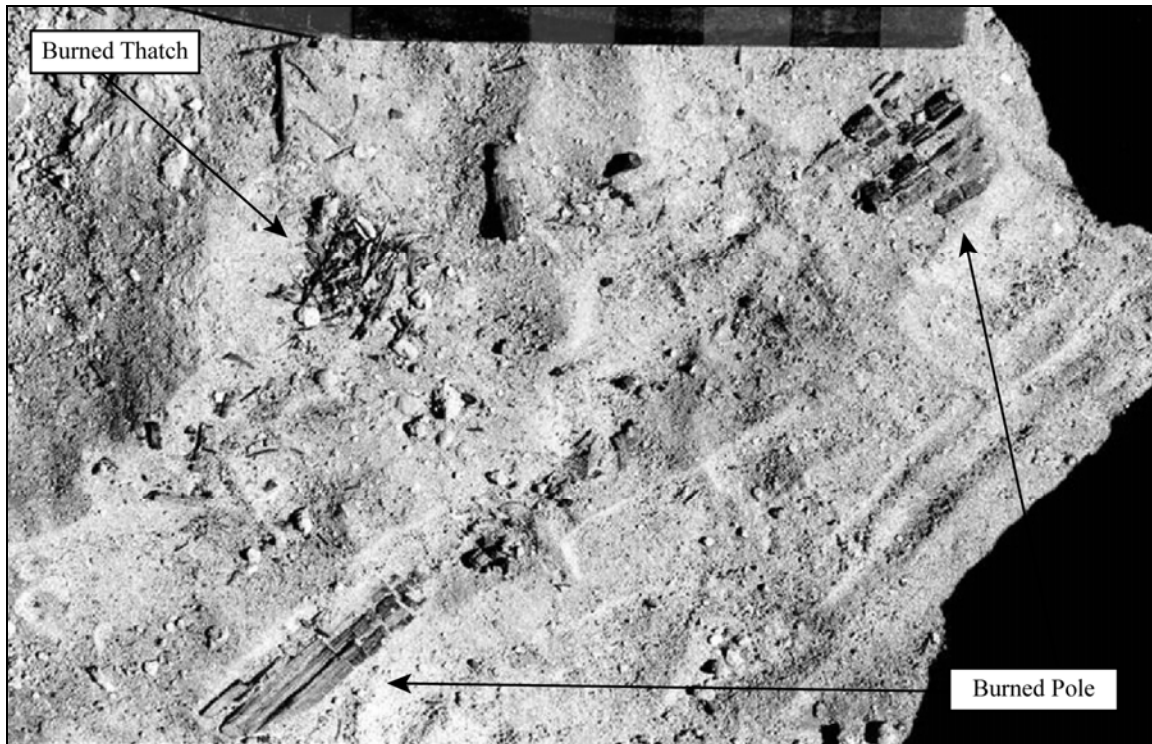
*Building and Room Function:* Building and room functions were determined by developing activity group profiles as described in the Artifact Analysis, Theoretical Background, and Methodology section. The activity profile for Structure A is shown in Table 5. In Table 6 and Figure 31 building materials have been eliminated so that the relative value of other activity groups in the profile can be better understood. Munitions dominate the Structure A assemblage at 41 percent, followed by garment items at 19 percent, consumer items at 10 percent, and kitchen and personal items at 9 percent each. Other activity groups make up 6 percent or less of the collection.

In Figure 32 and Figure 33, activity profiles for the east and west rooms are compared. In Figure 32, the percentages are calculated by the total number of artifacts in the structure. In Figure 33, the values were determined by using the total number of artifacts recovered from each room. Some major differences can be seen. The east room produced 81 percent of the artifacts (52 items). All the munitions, personal items, household items, a coin, and most of the garment items were recovered from the east room. The munitions included buckshot, a lead ball, and percussion caps. Shoe eyelets, suspender hardware, and buttons made up the garment items. Personal items included a lace making bobbin, a desert rose quartz mineral specimen, and a red clay smoking pipe.

The west room assemblage, on the other hand, was dominated by consumer and kitchen items that included liquor and culinary bottles, eggshell fragments, and pieces of undecorated ceramic earthenware. This suggests that the east room may have been a sleeping room where garments, personal belongings, and weapons were stored, while the west room may have served as a kitchen and dining room, where meals and beverages were prepared and consumed. These different activities explain the higher number of artifacts in the east room where a wider variety of items would have resulted in greater loss.

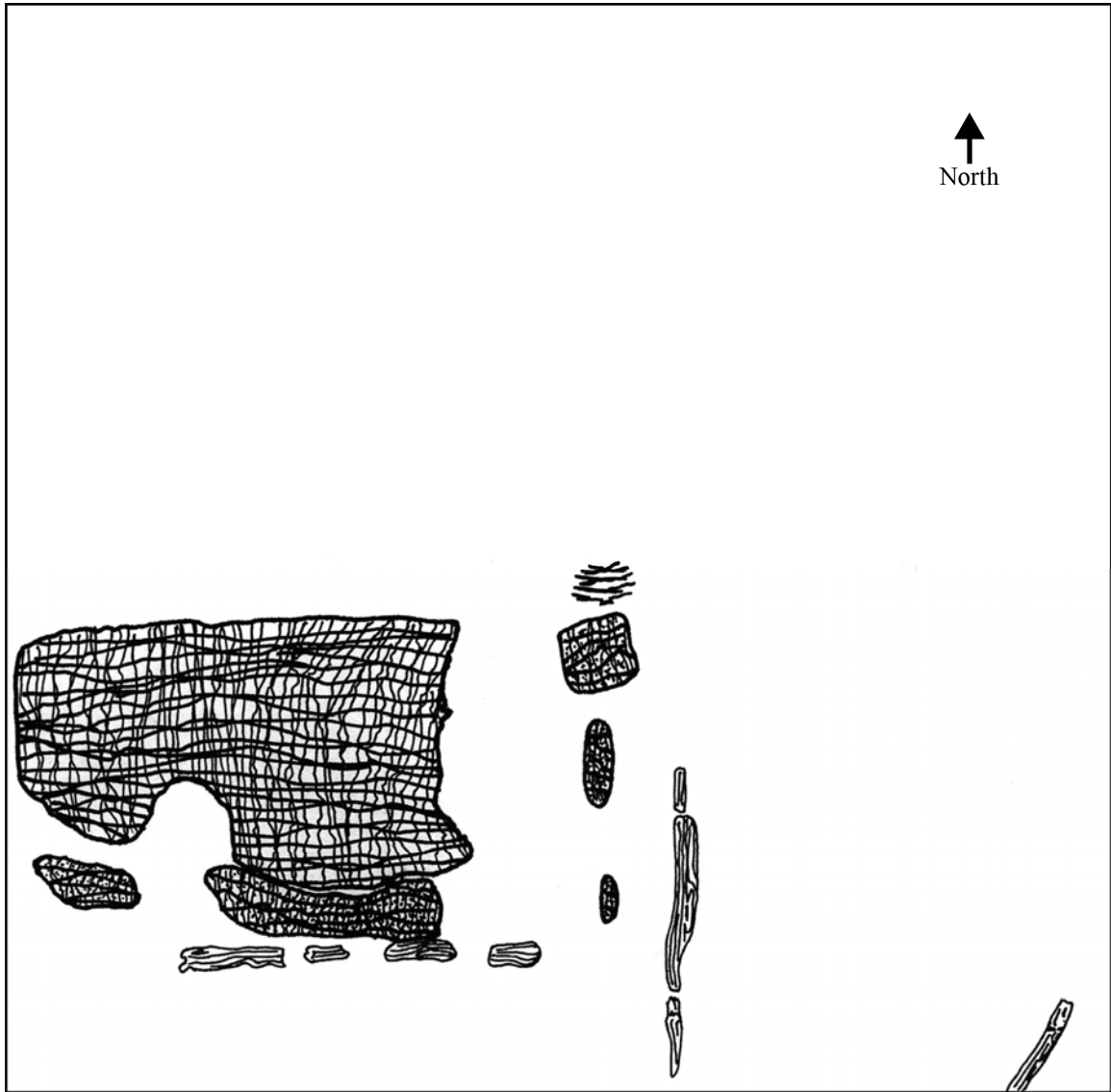






(a) Structure A, North Wall Foundation and Doorway, 2002 (by California State Parks).



(b) Structure A, Unit S6/W6, Burned Thatch and Pole Fragments, 2002, view to west (by California State Parks).

Figure 29. Structure A North Wall Foundation, Doorway, Burned Thatch, and Pole Fragments.



-  Burned Thatch
-  Burned Limb Segments
-  Unburned Twigs
-  Unburned Thatch

—|—————|  
One Foot

Figure 30. Structure A Plan View of Roof Fall in West Room, Unit S6/W6.

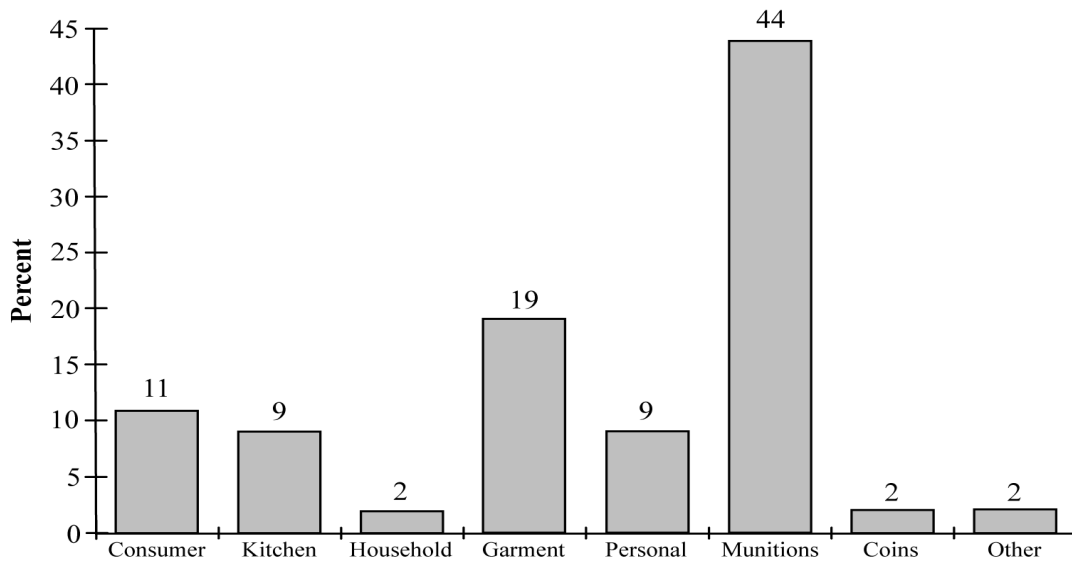


Figure 31. Structure A Activity Profile without Building Materials.

Table 5. Structure A Activity Profile.

ACTIVITY	QUANTITY	PERCENT
Consumer	7	5.43
Munitions	28	21.71
Personal	6	4.65
Kitchen	6	4.65
Building Materials	65	50.39
Garment	13	10.08
Household	1	0.78
Coins	1	0.78
Unidentified Items	2	1.55
Total	129	100.00

Table 6. Structure A Activity Profile without Building Materials.

ACTIVITY	QUANTITY	PERCENT
Consumer	7	10.94
Munitions	28	43.75
Personal	6	9.38
Kitchen	6	9.38
Garment	13	20.31
Household	1	1.56
Coins	1	1.56
Unidentified Items	2	3.13
Total	64	100.00



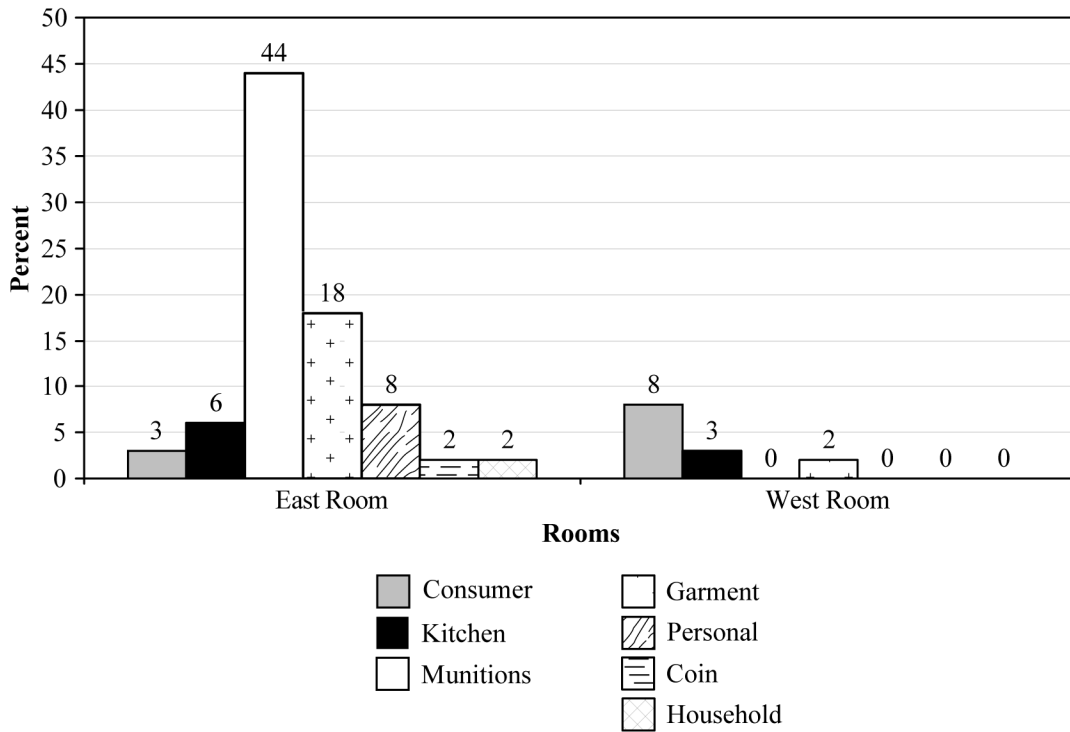


Figure 32. Structure A Activity Profiles Quantified by Artifact Totals.

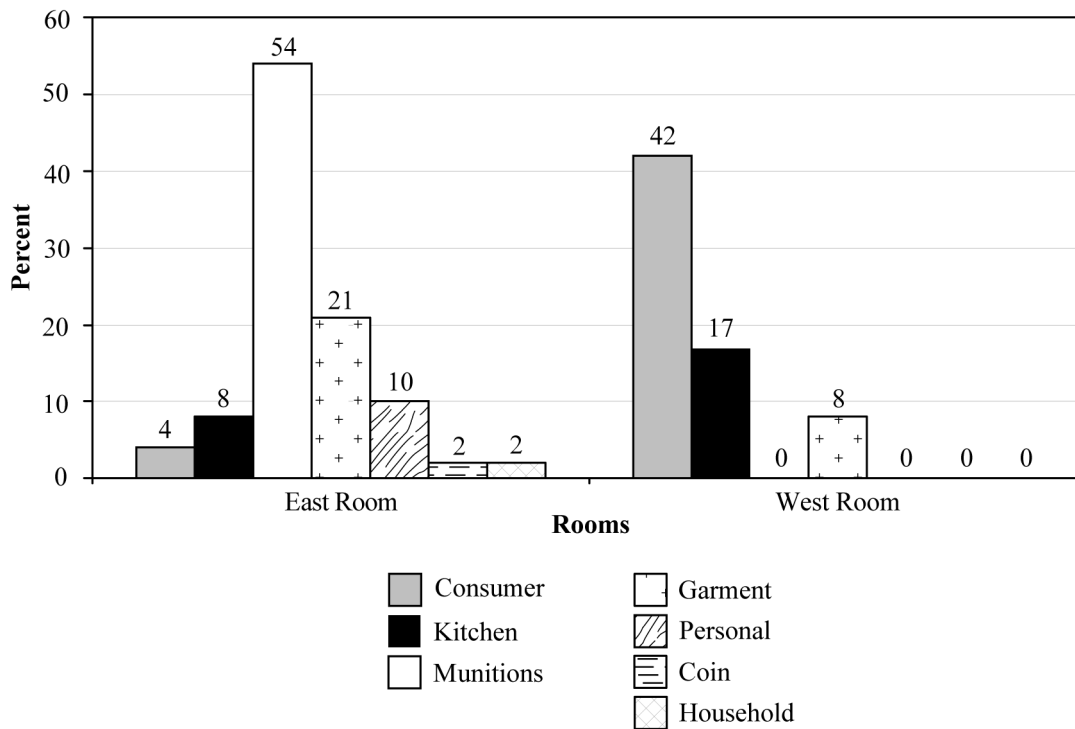


Figure 33. Structure A Activity Profiles Quantified by Room Totals.

## **Features A1 and A2**

Features A1 and A2 represented a small trash scatter on the west side of the Structure A. A total of eight items were represented and included a cow horn core, a lid to a molded ironstone sugar bowl, three bottles, a lead bullet for a cap and ball revolver, an ironstone saucer, and a gun flint. The artifacts were located adjacent to the building and extended westward on an old sloping ground surface approximately 18 inches below the present ground surface (Figure 34a). This scatter was designated Feature A1. Feature A2 was a pit dug into the old surface and back filled with adobe rubble, suggesting it was excavated sometime after the building fell into ruin. It contained fragments of the same artifacts identified in A1 demonstrating that the pit had disturbed the original trash scatter.

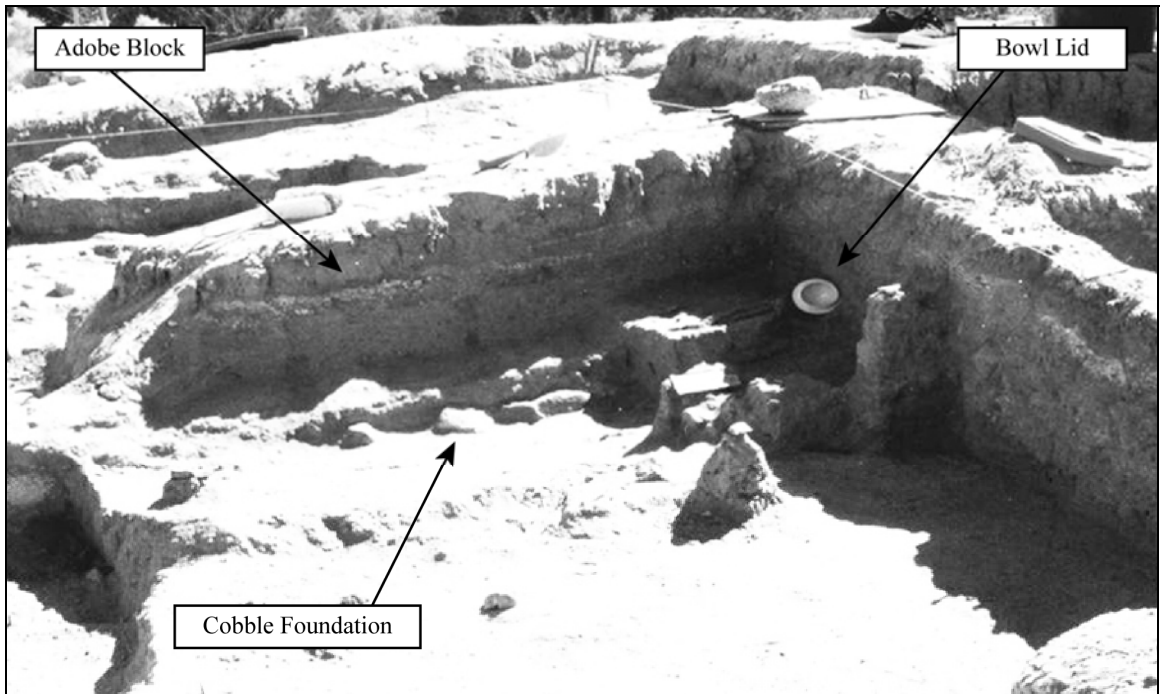
## **Feature B4**

Feature B4 was a trash pit located six feet northwest of Structure A. This dump had originally extended further to the south and had been partially destroyed by the erosional channel bisecting the site. It was discovered while cleaning the north bank of the gully in preparation for drawing a stratigraphic profile. The full extent of the feature was not determined. The deposit was 12 to 24 inches below present ground surface and extended westward under the earthen dike built by Buster McCain, where it was covered by more than four feet of soil (Figure 34b). The trash was in a dense ash lens, six to 18 inches thick, that slopes gently downward toward the north and west (Figure 35). At around eight feet from the western edge of the feature this strata gave way to water-deposited silts, where a channel had eroded into the ash lens and mixed eroded soils with the artifacts. Datable items from the feature are listed in Table 7. There are no introduction dates after 1857 and a variety of items that were not manufactured after 1860 and 1864. This would suggest a deposition date of the late 1850s or early 1860s and corresponds nicely with the operation dates of the Overland Mail from 1857 to 1861. A wide variety of cultural material was recovered including large quantities of metal, butchered bone, ceramics, Native American pottery, munitions, garment items, and bottle glass. The activity profile for the feature is listed in Table 8 and Table 9 and shown in Figure 36. As a household garbage pit, it is unique in that it is dominated by munitions rather than consumer items and kitchen artifacts.

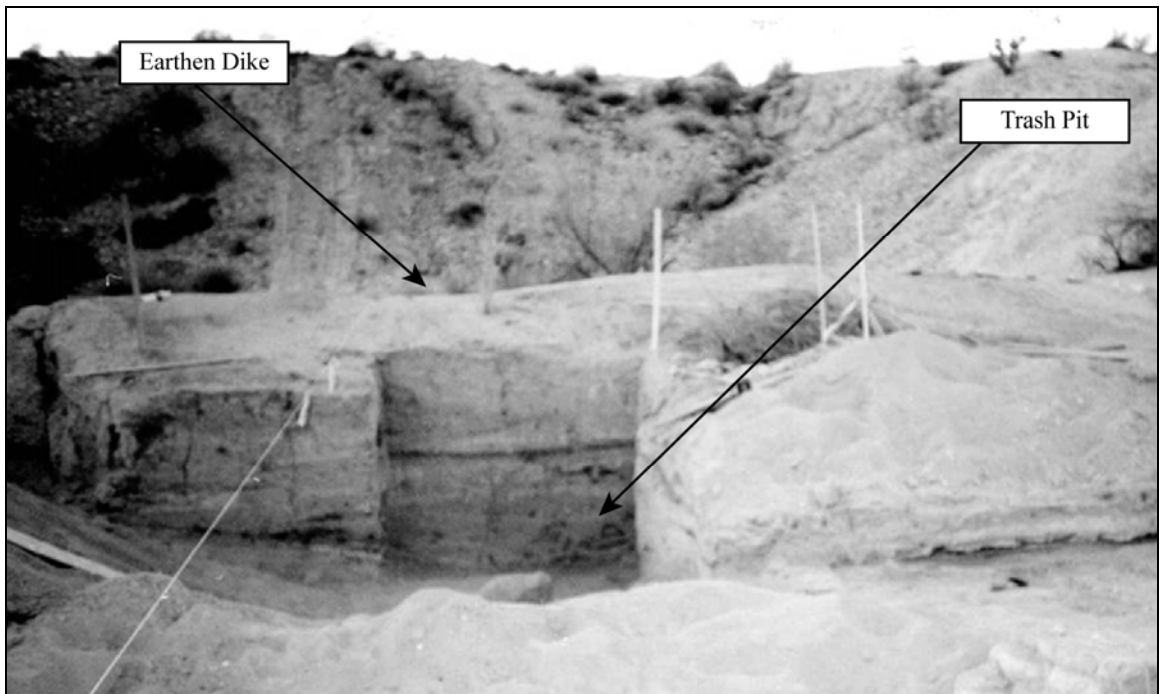
## **Feature B2**

Feature B2 was a rectangular shaped ash lens approximately one inch thick that measured seven by 14 feet. It consisted of a thick dark wood ash that had an exceptionally high number of square nails. Almost 12 square feet of the feature was excavated and screened resulting in 95 nails (Figure 37a). Other artifacts included a large quantity of carbonized barley seed, a pepper sauce bottle, a lead round ball bullet, a percussion cap, a clay smoking pipe, and fragments of a Native American pottery vessel.

The activity profile is shown in Table 10 and Table 11 and is presented graphically without building materials in Figure 38. The barley grains, which were classified in an animal husbandry activity group, dominate at 86 percent. The feature seems to represent a wooden structure that was used for feed storage. The 1860 census indicates that 12 tons of barley and 12 tons of hay were stored at the station.



(a) Structure A, 6S/30W, Feature A1/A2, 2002, view to southeast (by California State Parks).



(b) Structure A, Feature B4, West Wall Profile, 2002, view to west (by California State Parks).

Figure 34. Features A1/A2 and B4.

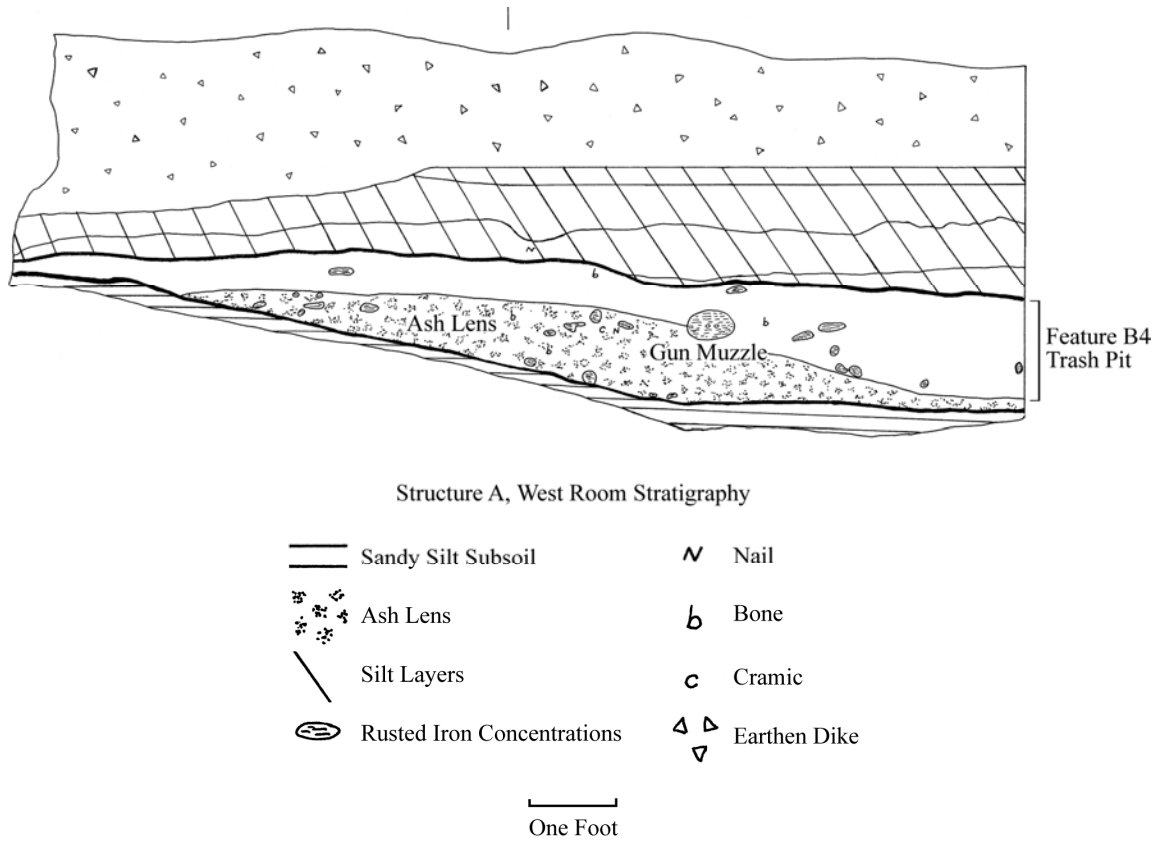


Figure 35. Feature B4 West Wall Profile of Units 0/W42 and N6/W42.

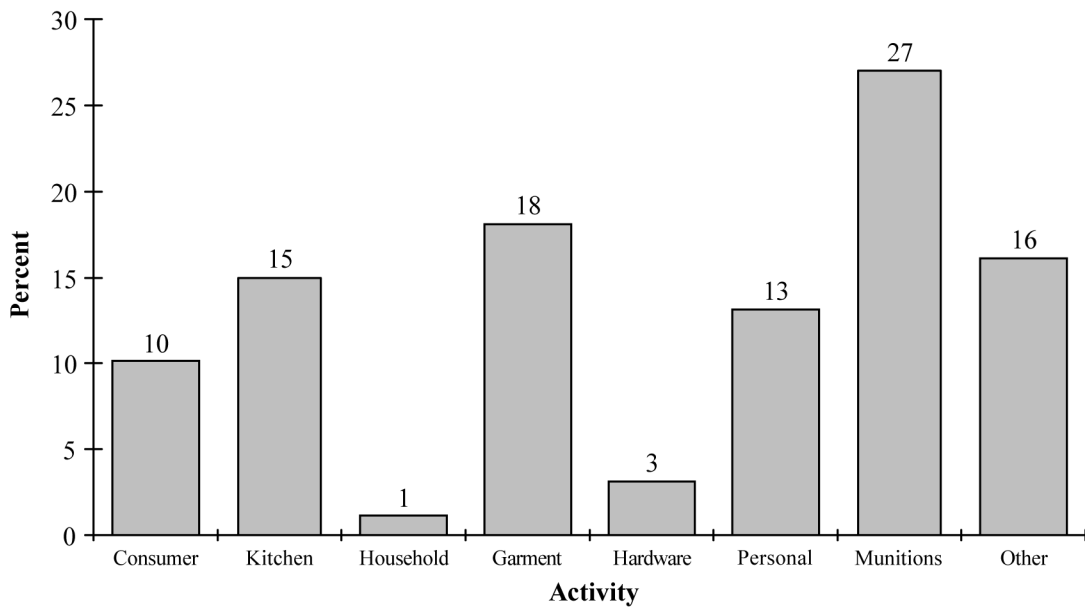


Figure 36. Feature B4 Activity Profile without Building Materials.

Table 7. Datable Artifacts from Feature B4.

ITEM	TYPE	TECH.	DESCRIPTION	DATE	#	REFERENCE
Plate, Large	Molded	Earthenware	Manufactured by William Adams & Sons in England.	1800-1864	1	Godden 1964:21(18); Freeman 1954:10
Plate, Large	Molded	Earthenware	ID: "Adams"; Impressed. Manufactured by William Adams & Sons in England.	1800-1864	1	Godden 1964:21(18); Freeman 1954:10
Flatware	Tea Spoon	-	Pattern: Tipped (there are 9 versions of this pattern). International Silver.	1847	1	Drake 1984:40
Bottle	Pepper - Spice	Hand Finished Lip, No Pontil	Pattern: Octagon Paneled Spice Bottle	1850-1885	1	-
Jar	Tooth Paste	Earthenware	"Seven Highest Premiums / Awarded / Also / A / Prize-Medal / At The / World's Fair / London 1851 / To K. Bazin. / Philadelphia"; Underglaze Black Transfer, Manufactured by K. Bazin in Philadelphia, Penn.	1851	1	-
Bottle	Case Gin	Blm,* Dip Mold, Shear Tool Lip	ID: J.T. Daly Club House; Manufactured by J.T. & W.H. Daly in New York.	1857-1885	1	-
Bottle	Case Gin	Blm, Dip Mold, Shear Tool Lip	ID: J.T. Daly Club House; Manufactured by J.T. & W.H. Daly in New York.	1857-1885	1	-
Cups, No Handle	Hand Paint Floral Polychrome	Earthenware	Pattern: Sprigs Style; 4 Petals Red Flowers & Red Buds, Lt. Green Leaves.	Pre 1850-1860	3	Wood 1959:29,34; Williams 1981:15
Saucer	Hand Paint Floral Polychrome	Earthenware, Blue Puddling	Pattern: Sprigs Style; 4 Petals Red Flowers & Red Buds, Lt. Green Leaves. ID "17". Impressed. Unidentified origin.	Pre 1850-1860	1	Wood 1959:29,34; Williams 1981:15
Bottle	Ale - Junk Bottle	Blm	-	Pre 1885	1	-
Bottle	Condiment - Pickle Jar	Blm Hand Finished Packer Lip	Pattern: Plain Cathedral Style Wide Mouth Bottle.	Pre 1885	1	-
Bottle	Condiment - Pickle Jar	Blm	Pattern: Cathedral Style Wide Mouth Bottle Panels.	Pre 1885	1	-
Bottle	Condiment	Blm Hand Finished Packer Lips	-	Pre 1885	3	-
Bottle	Ink - Umbrella Ink	Blm, Blow Pipe Pontil	-	Pre 1885	1	-
Bottle	Unidentified	Blm Hand Finished Lip	-	Pre 1885	1	-
Bottle	Unidentified	Blm, Hand Finished Lip, Sun Colored Amethyst	-	Pre 1885	1	-
Total					20	

Notes: Blm – Hand blown in mold; Tech. – Technology; Mnfg. – Manufacturing.

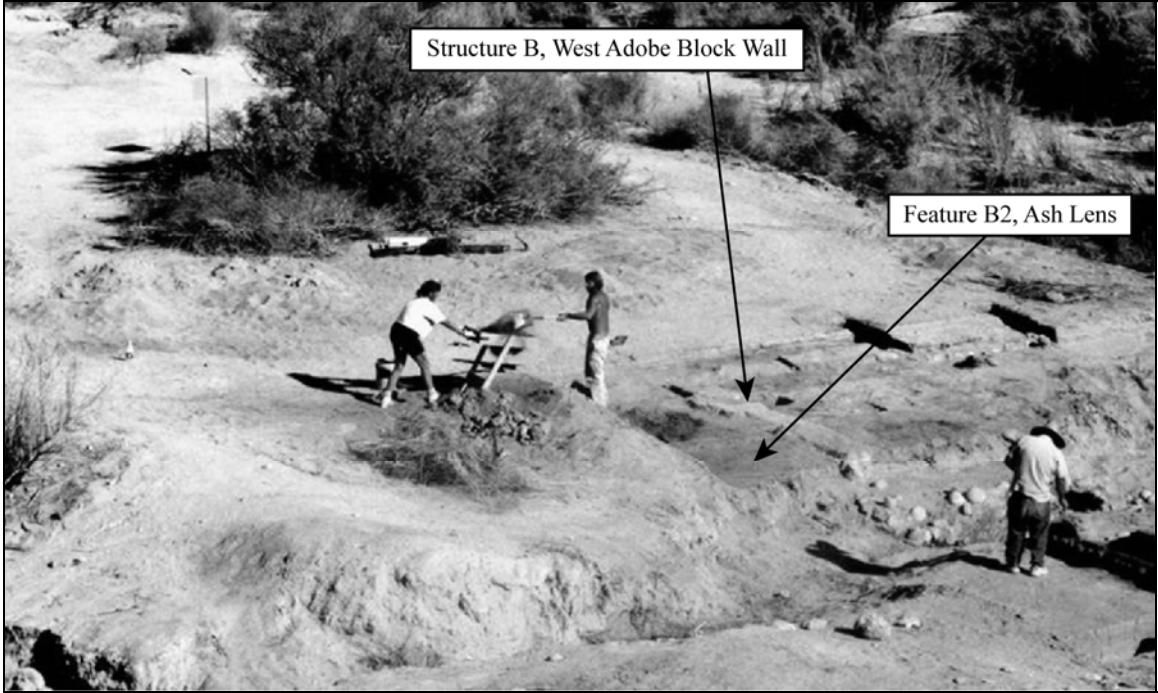
Table 8. Feature B4 Activity Profile.

ACTIVITY	QUANTITY	PERCENT
Consumer	18	1.34
Livery	5	0.37
Munitions	51	3.79
Personal	25	1.86
Kitchen	29	2.15
Building	1,159	86.04
Coin	1	0.07
Garment	34	2.52
Hardware	6	0.45
Household	2	0.15
Unidentified	17	1.26
Total	1,347	100.00

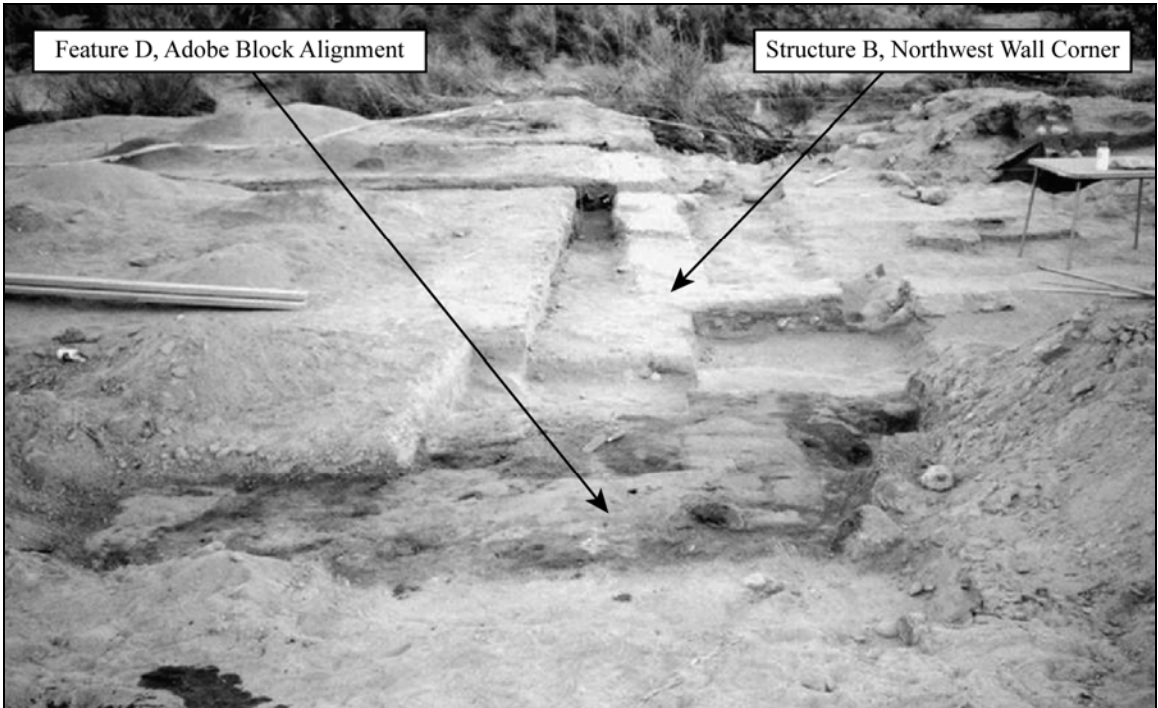
Table 9. Feature B4 Activity Profile without Building Materials.

ACTIVITY	QUANTITY	PERCENT
Consumer	18	9.57
Livery	5	2.66
Munitions	51	27.13
Personal	25	13.30
Kitchen	29	15.43
Coin	1	0.53
Garment	34	18.09
Hardware	6	3.19
Household	2	1.06
Unidentified	17	9.04
Total	188	100.00

Although it was located immediately to the west of Structure B, Feature B2 appears to be an earlier construction that is not associated with that structure. As previously discussed, the dense ash lens of this feature overlies approximately 12 inches of water deposited sediments that cap the refuse deposit of Feature B4, indicating it was built and later burned after the trash pit had been abandoned and closed (Figure 39). The ash lens of Feature B2 has, in turn, been bisected by a wall trench of Structure C, which shows that Structure C was built after the structure represented by Feature B2 burned (Figure 40). Overlying Structure C was the remains of Structure B, which obviously demonstrated that it was the last in the sequence to be built. Chronologically, therefore, the structure represented by Feature B2 can be placed after the trash pit of Feature B4 was no longer in use, but prior to the construction of Structure C or Structure B (Figure 39 and Figure 40).



(a) Structure B, Feature B2, 2002, view to northeast (by California State Parks).



(b) Structure B, Feature D, 2002, view to southeast (by California State Parks).

Figure 37. Feature B2 and D.

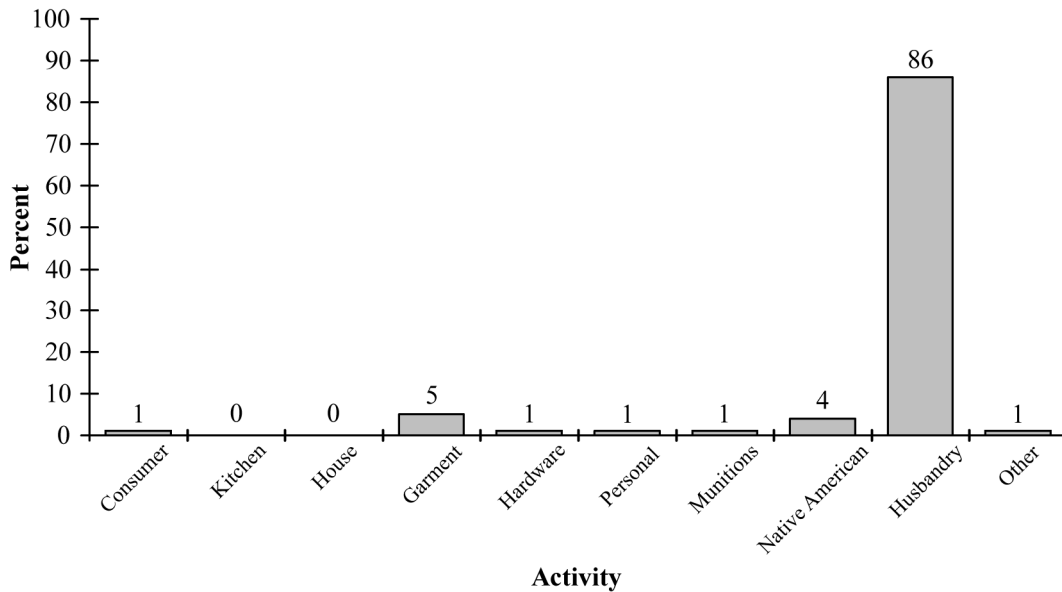


Figure 38. Feature B2 Activity Profile without Building Materials.

Table 10. Feature B2 Activity Profile.

ACTIVITY	QUANTITY	PERCENT
Consumer	2	0.76
Munitions	2	0.76
Personal	1	0.38
Native American	7	2.67
Animal Husbandry	144	54.96
Building Material	95	36.26
Garment	9	3.44
Hardware	1	0.38
Unidentified Item	1	0.38
Total	262	100.00

Table 11. Feature B2 Activity Profile without Building Materials.

ACTIVITY	QUANTITY	PERCENT
Consumer	2	1.2
Munitions	2	1.2
Personal	1	0.6
Native American	7	4.19
Animal Husbandry	144	86.2
Garment	9	5.39
Hardware	1	0.6
Unidentified Item	1	0.6
Total	167	100



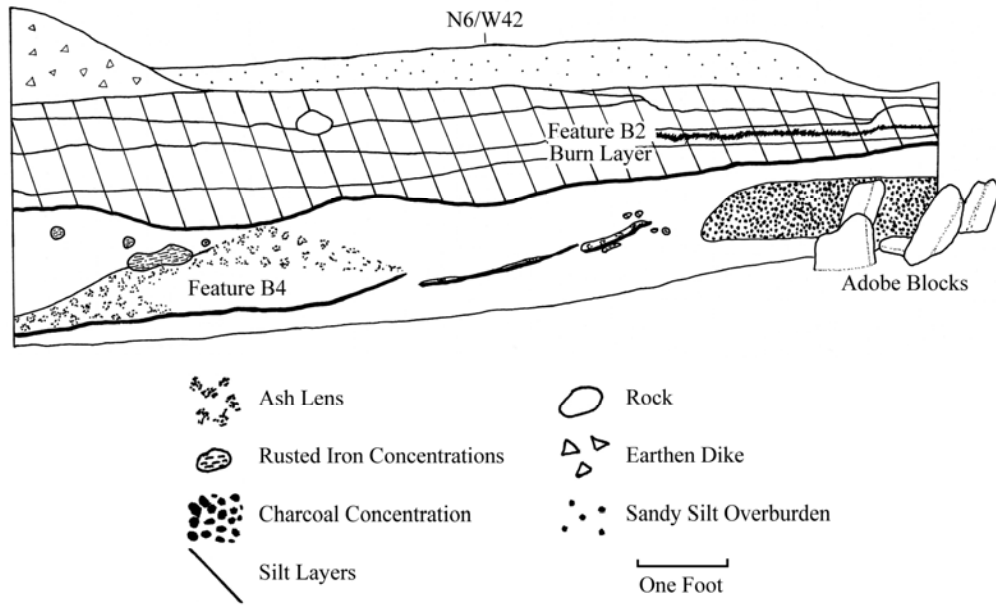


Figure 39. North Wall Profile of Units N6/W36 and N6/W42 showing Relationship between Feature B4 Trash Pit and Feature B2 Burn Layer.

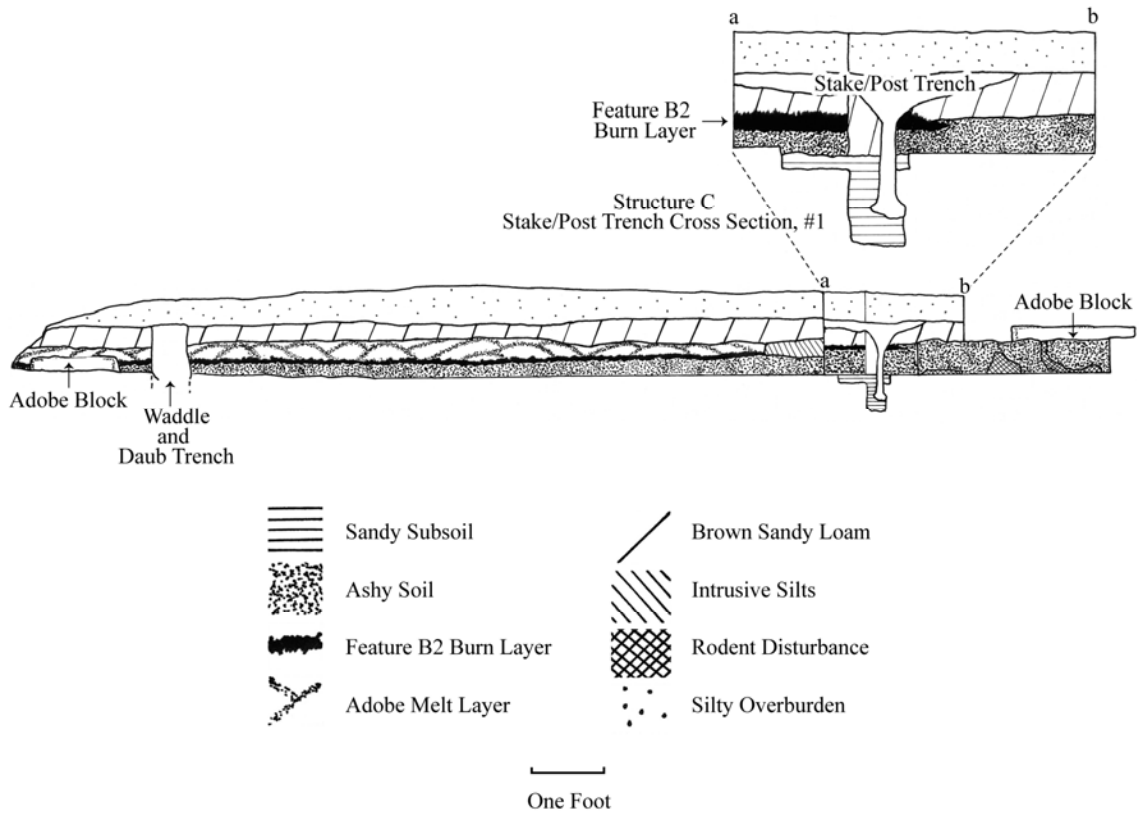


Figure 40. West Wall Profile of Units N5.75/W36 to N21/W36 showing Relationship between Feature B2 Burn Layer and Structure C Wattle and Daub Trench.

## Structure D

Two rectangular alignments of adobe blocks were encountered on the west side of Feature B2. These appeared as a thin lens of gray clay one to two inches thick and about 24 inches wide (see Figure 37b). The true nature of these remains have not been determined. They may represent the adobe corral that adjoined the station buildings that was observed by the Conklings in the 1920s.

## Structure C

Structure C consisted of the remains of a wattle and daub building discovered underneath the floor of Structure B (Figure 41). Evidence included alignments of small ocotillo or willow stake post holes and two small cobblestone hearths. The features were first discovered in the western half of Structure B in an area where the packed earthen floor surface of that building was indistinct and it was decided to excavate below the known level of the floor to see if it could be defined in the resulting stratigraphic profile. A very definite row of post molds around 1.5 to two inches in diameter, containing the remains of willow or ocotillo stakes, were encountered running in an east-west direction. The feature was about 18 inches south of the north wall of Structure B and parallel to it. In order to further define the wattle and daub construction, the packed earthen floor of Structure B was removed by troweling. The alignment of postholes was found approximately one inch below the floor (Figure 42a). It consisted of a narrow trench two inches wide with a series of willow or ocotillo stakes placed in it about 0.5 to one inch apart (Figure 43). The alignment was 27 feet long. It continued to the west, under Structure B's west wall, which had been built over it, and extended in the same direction for another eight feet. This portion was a continuation of the trench filled with brown soil. Some post molds and stakes were visible, but they were not as well preserved as the eastern portions. At the east end, puddled gray clayey silt, representing mud plaster daubing, could be seen around the stakes. Here the alignment abutted against a semi-circular feature constructed in the same manner. Most of this feature, unfortunately, had been destroyed by the erosional channel.

Under the rest of the floor, additional remains of the wattle and daub building were found. Several broken off branches or stakes were encountered, as well as additional post molds. None had the distinct alignment of the original discovery, although they obviously represented portions of the same structure. A series of post molds and broken stakes at the edge of the erosional channel, suggested that the remains of the south side of this structure was probably destroyed when the channel formed (see Figure 41).

There was no definite floor defined for Structure C. The post molds and stakes were excavated into a coarse sandy subsoil that underlies this entire portion of the site. Two small cooking hearths, designated Features C1 and C2, occurred in association with the wattle and daub remains. These contained the only artifacts recovered that could be associated with the structure. Both hearths measured approximately 12 inches in diameter and eight inches deep. They were located in the western portion of the structure, one against the north side of the main stake wall alignment (Figure 42b). The hearths consisted of loosely-packed water-worn stones with concentrations of ash and charcoal. Pieces of ground stone implements, including a combination mano and pestle and another mano fragment, were identified in C1 (Figure 44). Feature C2 contained two manos (Figure 45). Metal fragments in Feature C1,

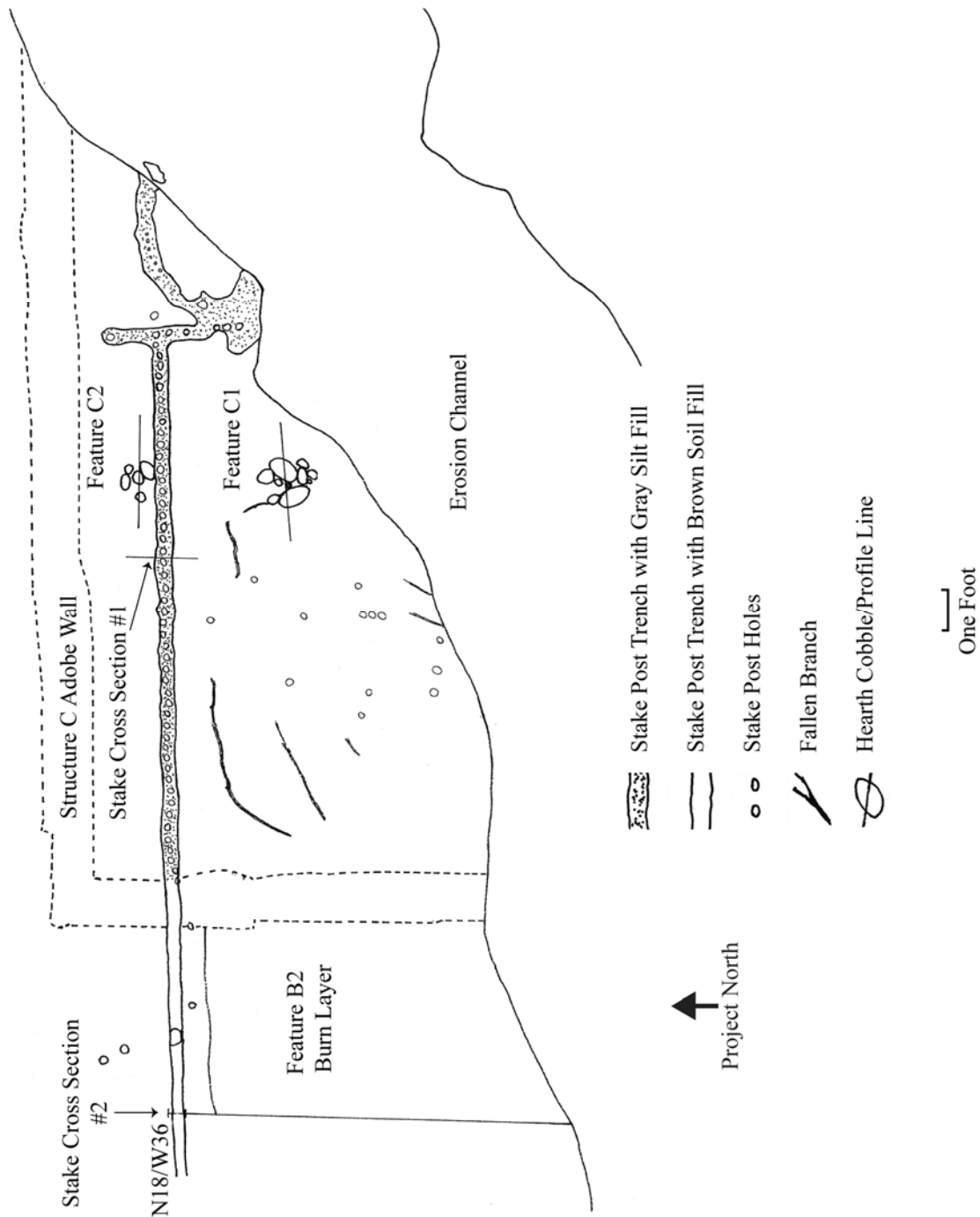
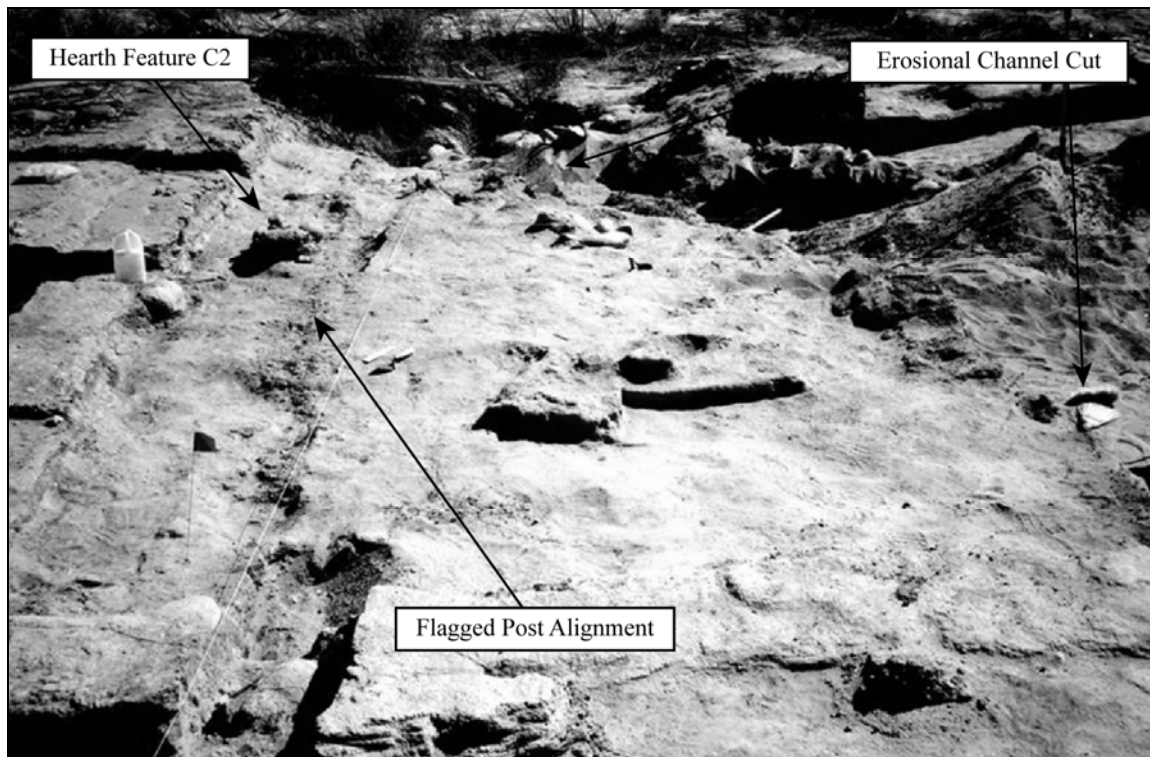
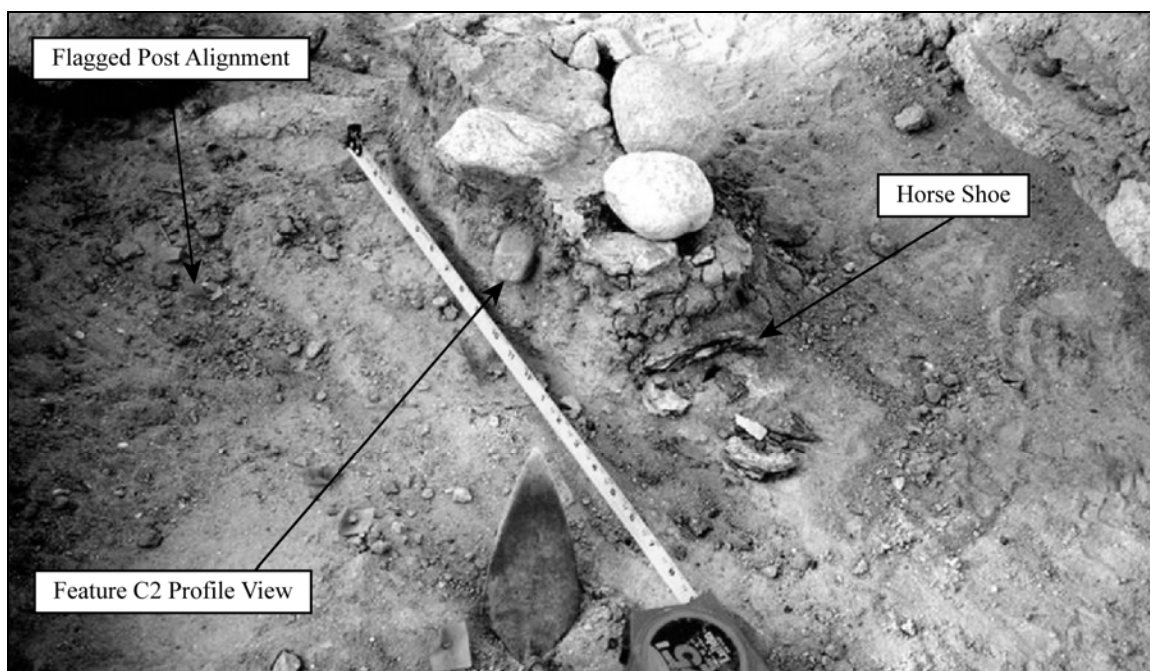


Figure 41. Structure C Archaeological Remains Site Map.



(a) Structure C, Posthole Alignment, 2002, view to southeast (by California State Parks).



(b) Structure C, Feature C2, 2002, view to north (by California State Parks).

Figure 42. Structure C Posthole Alignment and Feature C2.

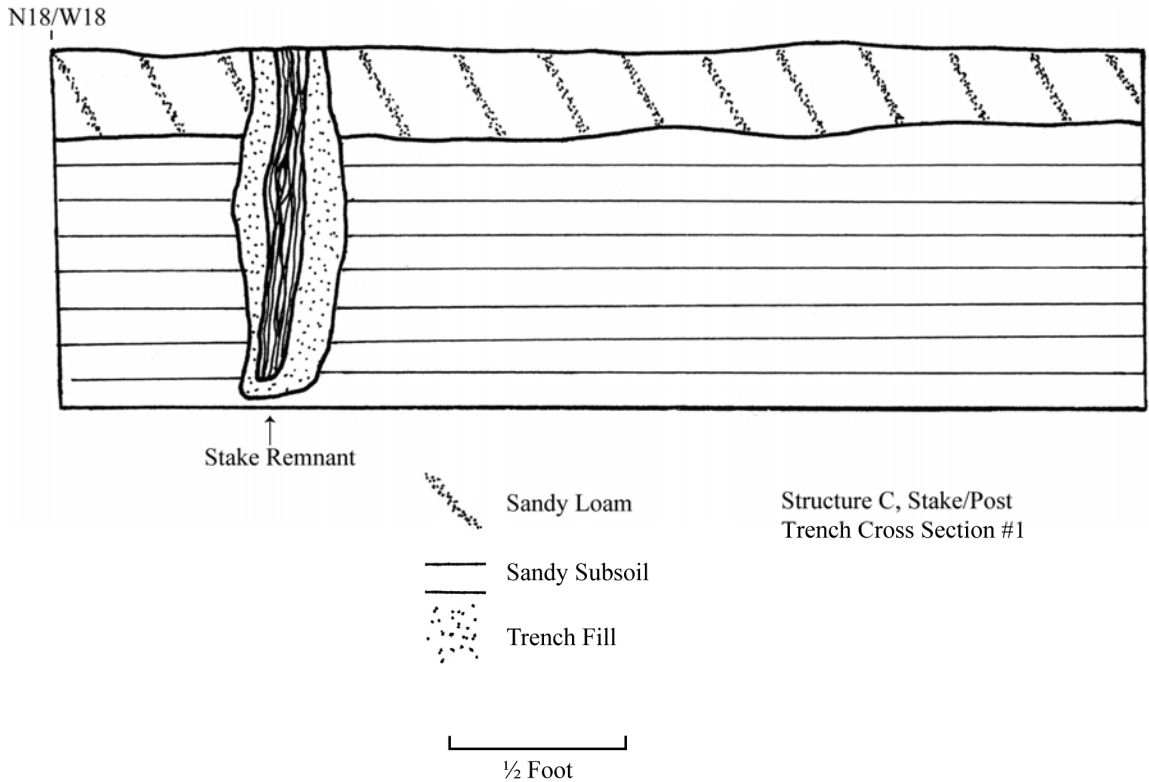


Figure 43. Structure C West Wall Profile bisecting North Wall.

and horseshoe fragments in Feature C2 indicated that, although the ground stone items are typical of those manufactured and used by Native Americans, these are Stage Station period features and do not represent an earlier prehistoric occupation. They do, however, reflect the influence of Native American food preparation methods on the station occupants.

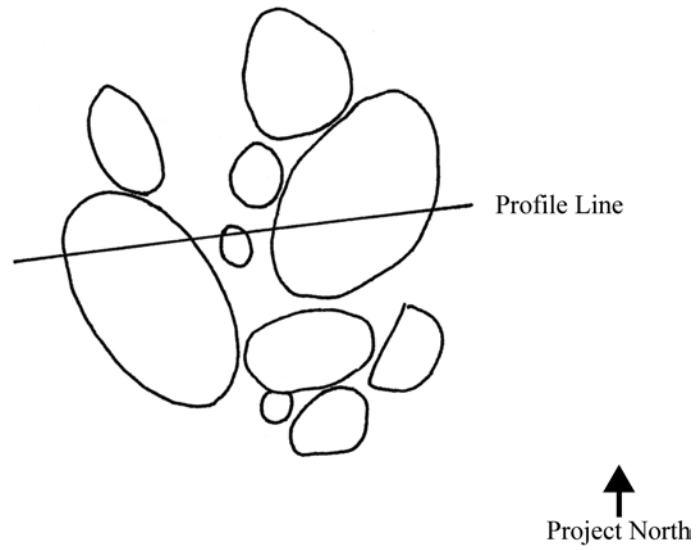
No artifacts were recovered from the levels associated with Structure C. It is possible that the lower layers of the packed earthen floor associated with Structure B was also the floor for C. The two small hearths in Structure C strongly indicate the building was used as a kitchen. The nature of the building and features recalls Charles Running's description of their quarters at Lassitor's Ranch in September 1857, where they "slept in a low hut with fire in the middle, Indian fashion. Had a good supper and breakfast—fresh butter, bread, mutton, coffee" (Running 1858).

### Structure B

Like Structure A, Structure B was a rectangular building measuring approximately 30 feet north-south by 18 feet, east-west (Figure 46). There were no remains of interior divisions.

*Condition and Stratigraphy:* Prior to excavation, Structure B consisted of an almost level terrace on the north side of the erosional gully. This is the area graded by Buster McCain in 1958. Close to 40 percent of what remained of the ruins after Buster had flattened them was later destroyed by erosion when the earthen dike overflowed. The

**PLAN VIEW**



**PROFILE VIEW**

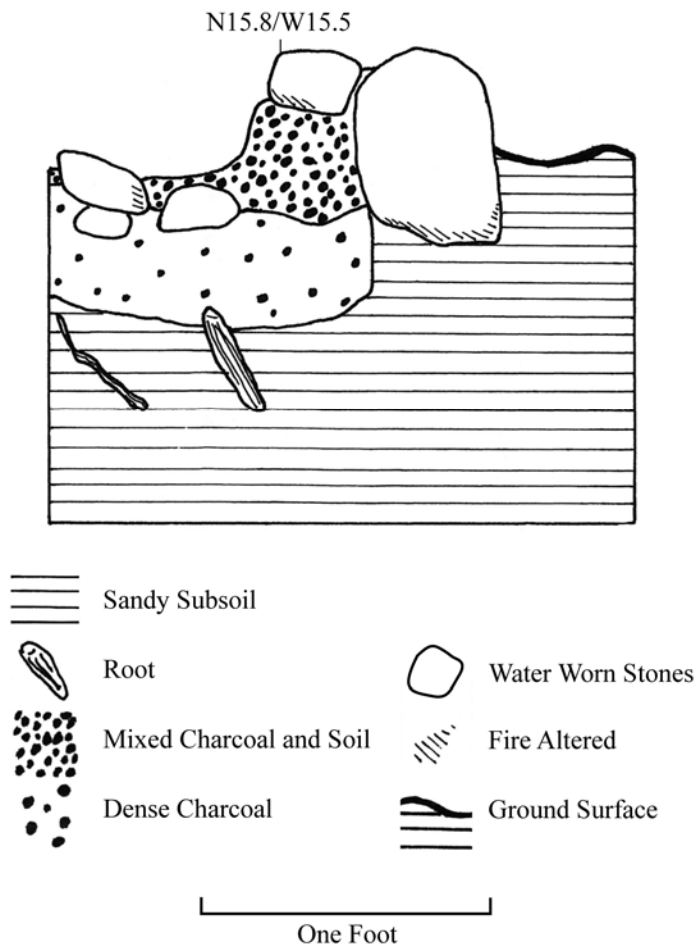
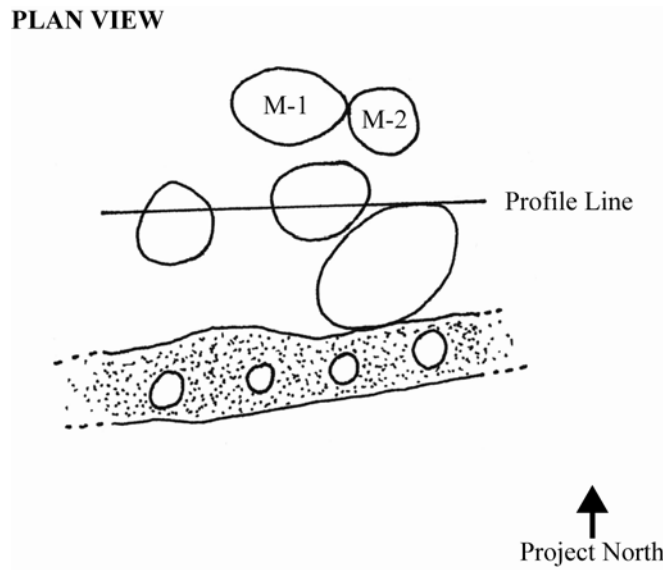


Figure 44. Feature C1 Hearth at Unit N15.8/W15.5.

**PLAN VIEW**



**PROFILE VIEW**

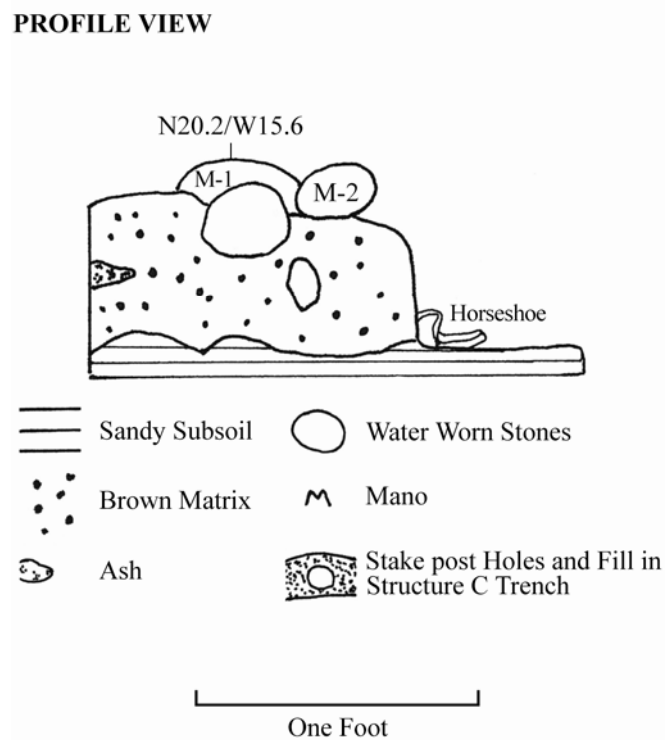


Figure 45. Feature C2 Hearth at Unit N20.2/W15.6.

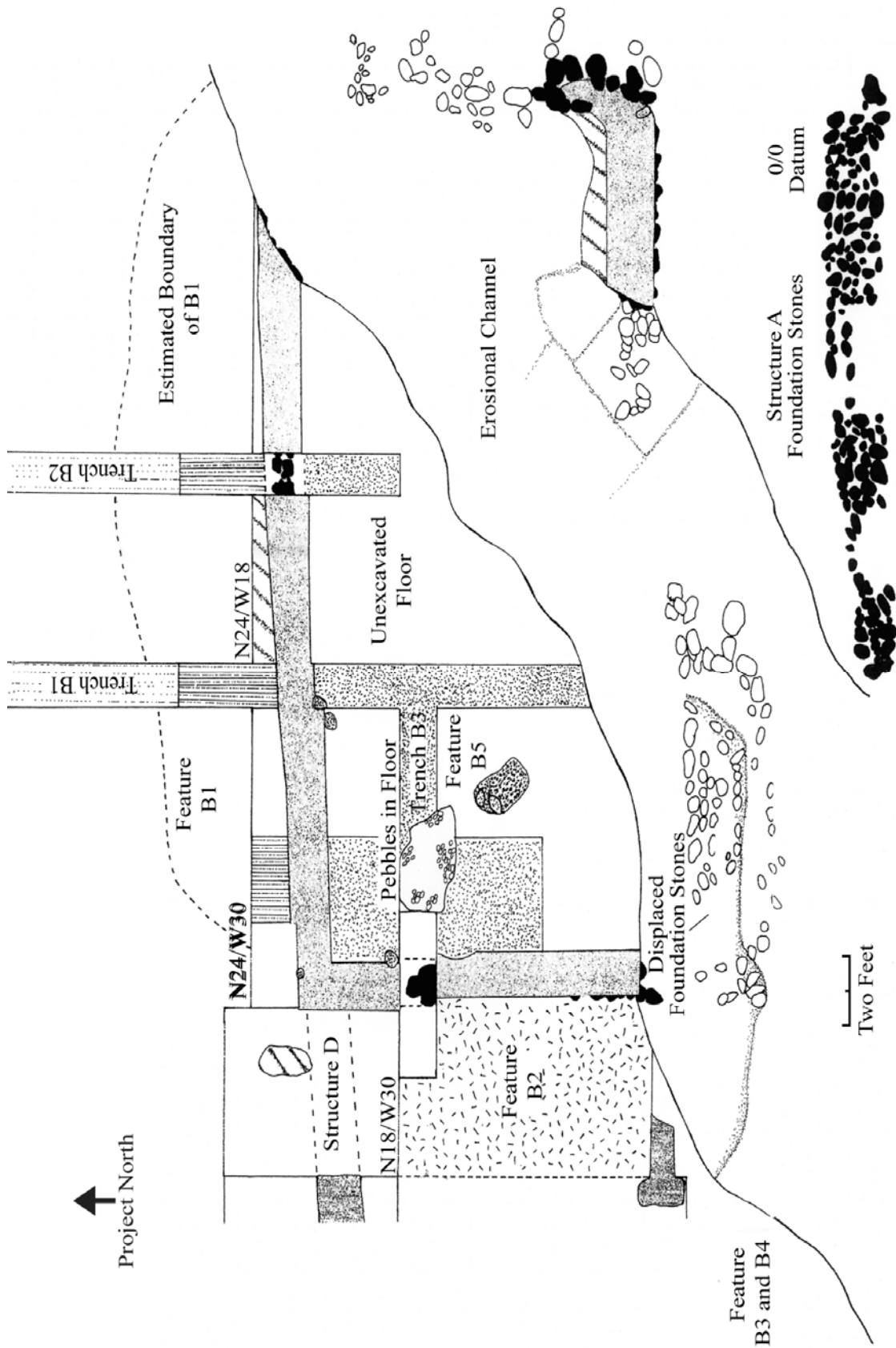


Figure 46. Structure B Archaeological Remains Site Map (As Exposed During Excavation).



channel took away most of the southern edge and east end of the building leaving a small segment of the southeast corner isolated on its south bank, and the remaining portion of the building on the north side. This became clear when the gully was cleared of brush and debris. Foundation stones, shallow wall remains, and burned surfaces representing floors could be seen in the north bank. This stratigraphic profile was sketched prior to excavation (Figure 47). In addition, displaced foundation stones were found in the bottom of the channel (Figure 48a). The stratigraphy of Structure B differs from that of Structure A. Extremely shallow wall remains occur at about 16 inches below the surface. A burned packed earthen floor within the perimeter of the walls is about 24 inches below the surface. The floor and walls are covered with around four to 12 inches of a light brown, sandy loam, consisting of fine layers of water deposited melted adobe. This layer is extremely level and uniform in thickness and appears to have been artificially leveled. It is what was left on the site after Buster McCain graded his pasture in 1958. This is covered with six to 12 inches of very light tan, fine, sandy, water-deposited silt that has come from the steep berm located directly west of the building remains.

From the stratigraphy and historic photographs, the following general chronology of the building's deterioration can be determined. Unlike Structure A, this building did not have layers of windblown sand covering the floor, suggesting it did not experience an extended length of time between abandonment and wall collapse. The highly burned condition of the floor suggests that it may have been used as a cooking area, with small hearths built directly on it, or it may also be the result of the roof burning off very rapidly. After the roof was destroyed, the walls almost immediately began to deteriorate and cover the floor, which was generally well preserved and covered with fine layers of melted adobe. The ruins were still visible enough in the 1920s that historians Roscoe and Margaret Conkling could distinguish both Structures A and B "separated by a hallway" (Conkling and Conkling 1947:227). In 1958, however, Buster McCain graded this portion of the stage station remains, leaving a uniformly level surface with no indication of the underlying architectural features.

*Foundations:* The foundations of Structure B are similar to those of Structure A. They are 18 to 24 inches wide and consist of one to two courses of 6-to-8-inch diameter round and oblong water-worn cobbles. Some are up to 12 inches in length. The stones are not as tightly packed as in the foundations of Structure A. However, as in Structure A, they are placed at ground surface and mortared together on the east end of the building and set in shallow trenches at the west end in order to compensate for a slight rise in the terrain.

*Blocks and Walls:* Wall remnants of Structure B consisted of a layer of dense gray clay, two to four inches thick, and approximately 24 inches wide, on top of the foundation cobbles. The footprint of the building could easily be seen by the dark gray outline in the surrounding ashy brown soil. This is all that remained of the bottom course of adobe blocks. The block material was very different from that used in Structure A, where the adobes had been made from a tan silty loam. The blocks in Structure B were of a dense gray clayey silt very similar to the material used in Structure A to cover the pebble floor pavement. Mortar must have been of the same material since no mortar joints could be detected. The fact that the wall material is consistently about 24 inches wide suggests that, as in Structure A, these block measurements probably averaged 12 x 24 x 4 inches and were laid in alternating courses of a single row of headers and two parallel rows of stretchers.

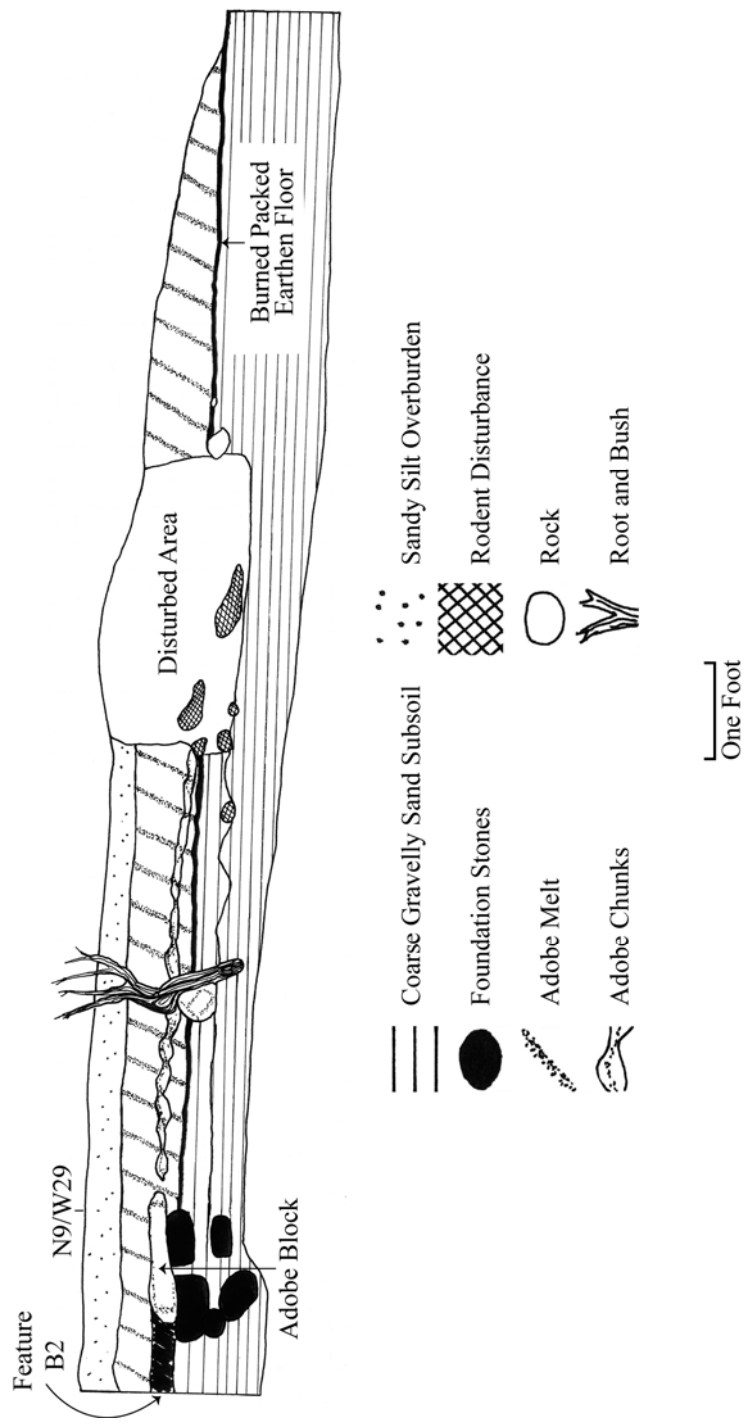
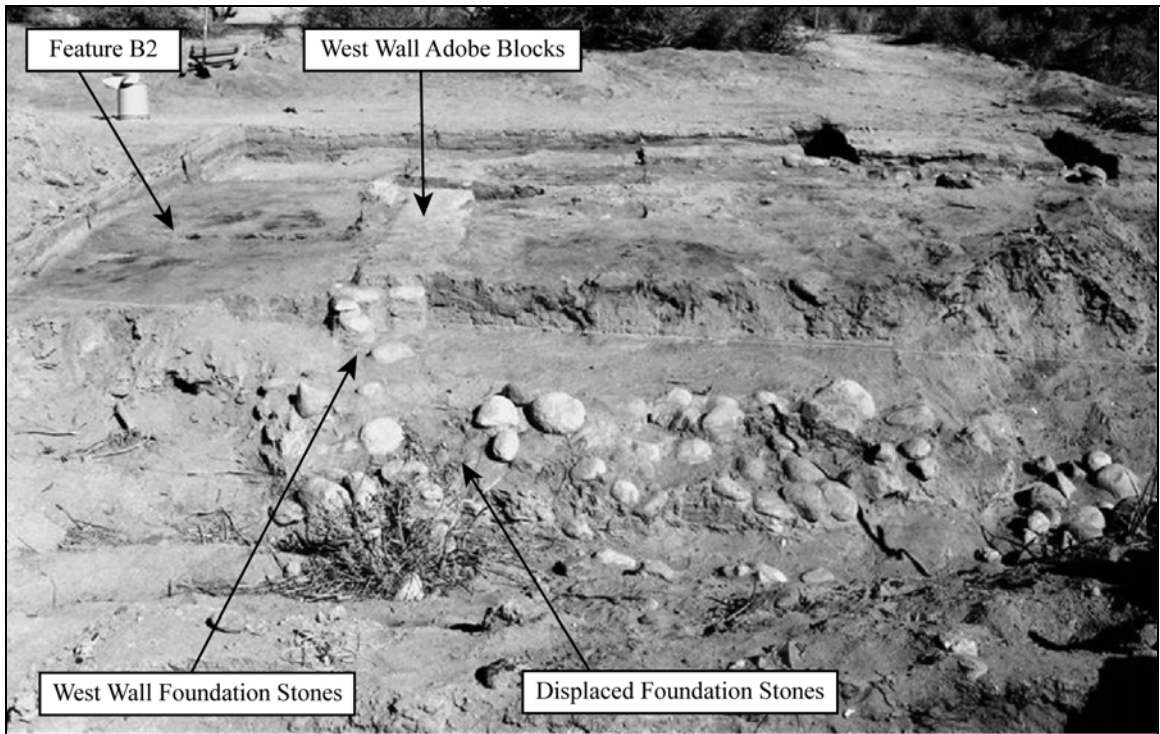


Figure 47. Erosional Gully North Bank Profile, Unit N20-N31.



(a) Structure B, West and South Wall Foundation Stones, 2002, view to north (by California State Parks).



(b) Structure B, Fire Hearth Feature B5, 2002, view to southwest (by California State Parks).

Figure 48. Structure B Wall Foundation Stones and Fire Hearth Feature.

*Floors and Roof:* The interior of Structure B had a packed earthen floor. It consisted of a very definite lens of hard-packed soil that could be detected by excavation with a trowel. The soil above the floor peeled back to this level as it was removed. In some places, especially toward the west end of the structure, the floor became less distinct and more difficult to define. Overall, the surface had a dark brown burned color with some areas of concentrated ash deposits (see Figure 46). In the east half of the building a small fire hearth, designated Feature B5, was identified on the floor (see Figure 48b). It consisted of fire-affected rock and a dense concentration of charcoal. The feature measured 20 by 17 inches by about four inches thick. It had been built on, and slightly excavated into, the floor surface. No roof fall was defined. The burned color of the floor appears to have been caused by use of this building as a kitchen and the consequent disbursement of ash as a result of cooking over open hearths with wood fueled fires. An intense fire, that burned the roof quickly, may also have contributed to the burned appearance of the floor. However, if this had occurred, a thicker layer of ash and charcoal would be expected. No door or window openings could be defined for this building. The doorway may have been on the south side of the building that has been destroyed by the erosional gully, and it may have opened into the hallway in a similar fashion as the doorway of Structure A.

The artifact activity profile for Structure B is shown in Table 12. It is shown without building materials in Table 13 and in Figure 49. The assemblage is dominated by kitchen items at 29 percent. This is followed by garment items at 20 percent, hardware and munitions at 11 percent, and consumer items at nine percent. Other activity groups made up less than five percent each of the artifact collection. Garment items included only overall and jeans fly buttons. Munitions consisted of percussion caps and a Civil War era mini ball. Kitchen items included fragments of eight Native American cooking pots, pieces of flow blue and Rockingham decorated ceramics, and a single peach pit. Fragments of liquor and culinary bottles made up the consumer items. The activity profile, the sooty scorched floor, and the small hearth of Feature B5 all reveal that this building was used as a kitchen, although the garment items, personal items, and munitions show that other activities also occurred there.

Table 12. Structure B Activity Profile.

ACTIVITY	QUANTITY	PERCENT
Consumer	3	2.36
Livery	2	1.57
Munitions	4	3.15
Personal	2	1.57
Kitchen	7	5.51
Building	92	72.44
Garment	10	7.87
Hardware	4	3.15
Household	1	0.79
Unidentified	2	1.57
Total	127	100.00

Table 13. Structure B Activity Profile without Building Materials.

ACTIVITY	QUANTITY	PERCENT
Consumer	3	8.57
Livery	2	5.71
Munitions	4	11.43
Personal	2	5.71
Kitchen	10	28.57
Garment	7	20.00
Hardware	4	11.43
Household	1	2.86
Unidentified	2	5.71
Total	35	100.00

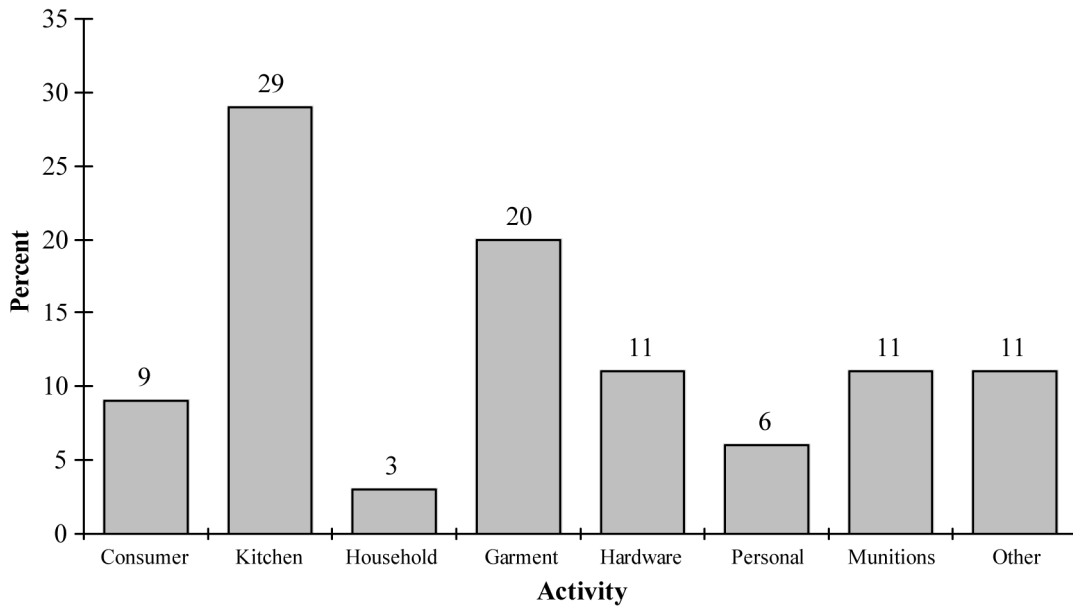


Figure 49. Structure B Activity Profile without Building Materials.

### Hallway

The seven-foot-wide passageway between Structures A and B was formed when Structure B was constructed (Figure 50 and Figure 51a). Although largely destroyed by the erosional channel, approximately eight feet of the former hallway area was still intact on the eastern edge of the site. Excavation encountered the original compacted surface between the buildings under three to nine inches of a loose sandy overburden (Figure 52). A variety of artifacts were recovered on and above this surface including fragments of Native American pottery, percussion caps, a hard rubber comb, and square nails. Most notable was 195 grams of window glass, indicating that there was a window in one of the buildings at this location. No artifacts were recovered below the packed surface. Table 14 and Table 15 and Figure 53 provide the activity profile for the Hallway.

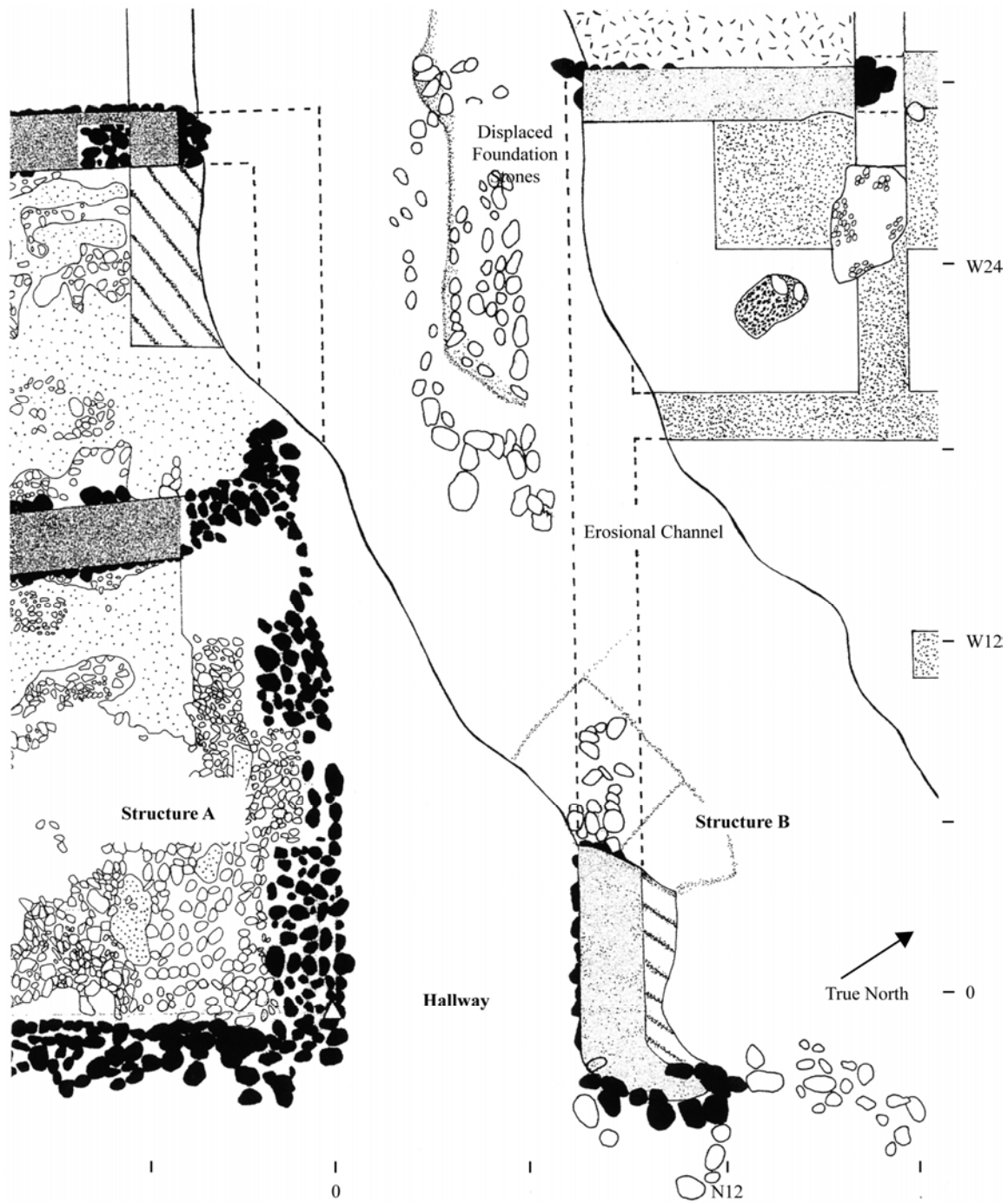
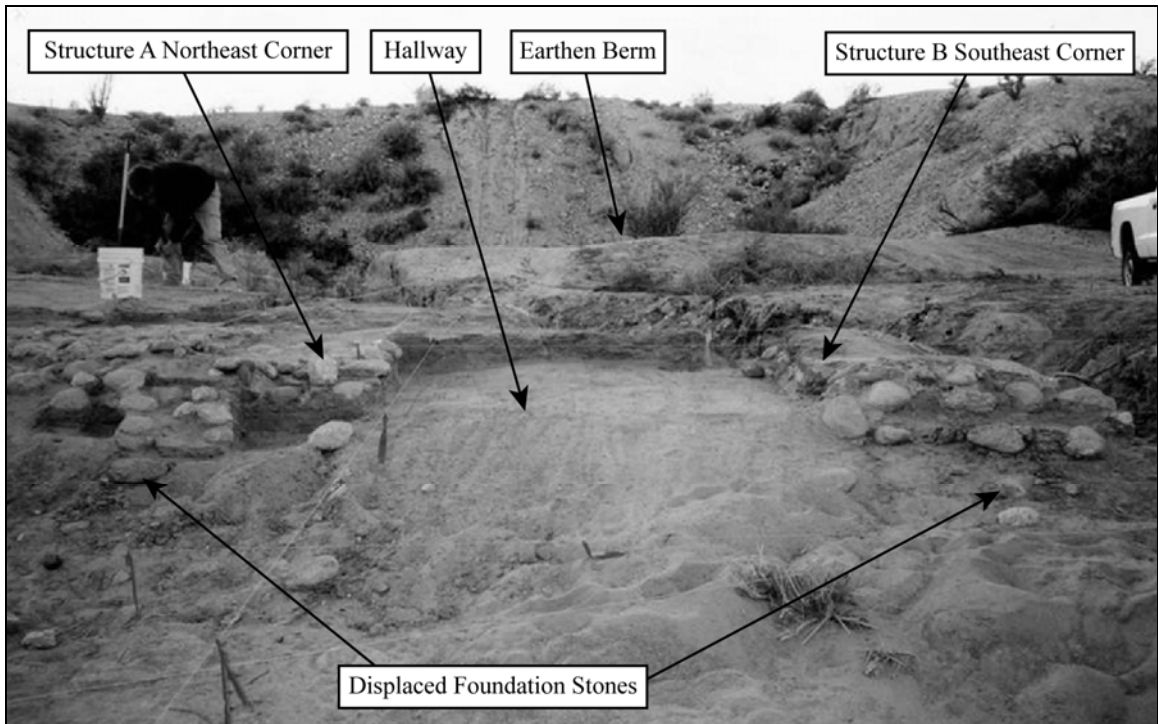
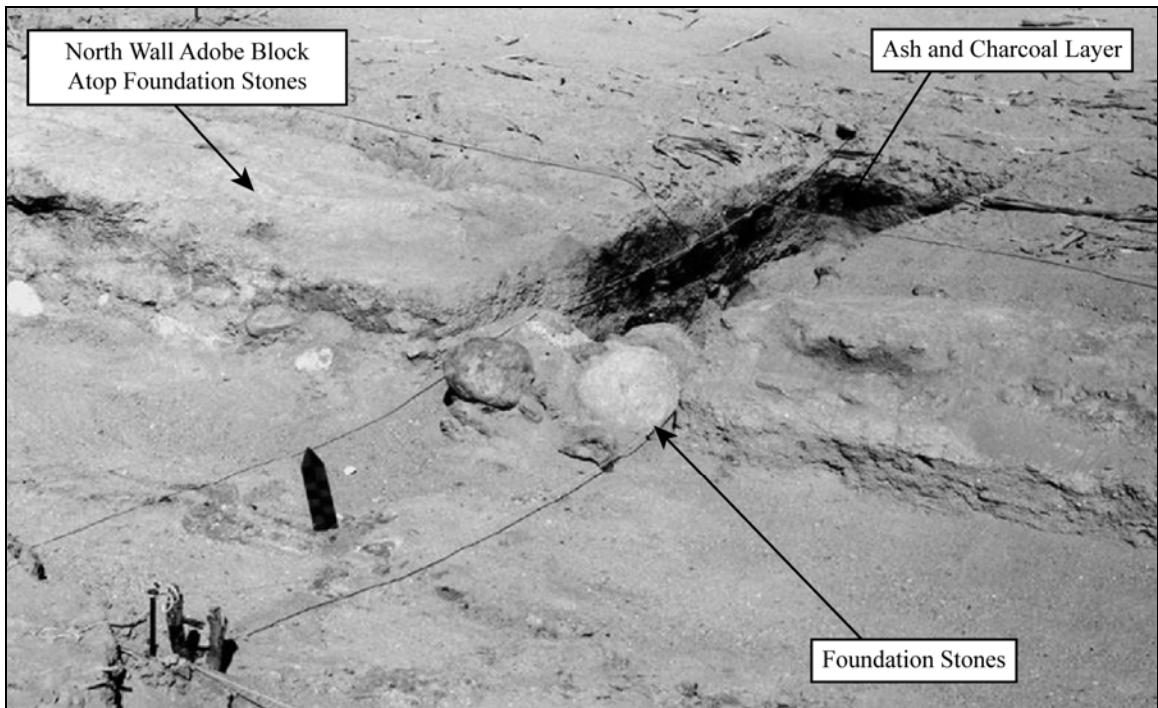


Figure 50. Hallway Plan View between Structure A and B.



(a) Hallway, 2002, view to north (by California State Parks).



(b) Structure B, Feature B1, 2002, view to northwest (by California State Parks).

Figure 51. Hallway and Structure B, Feature B1.

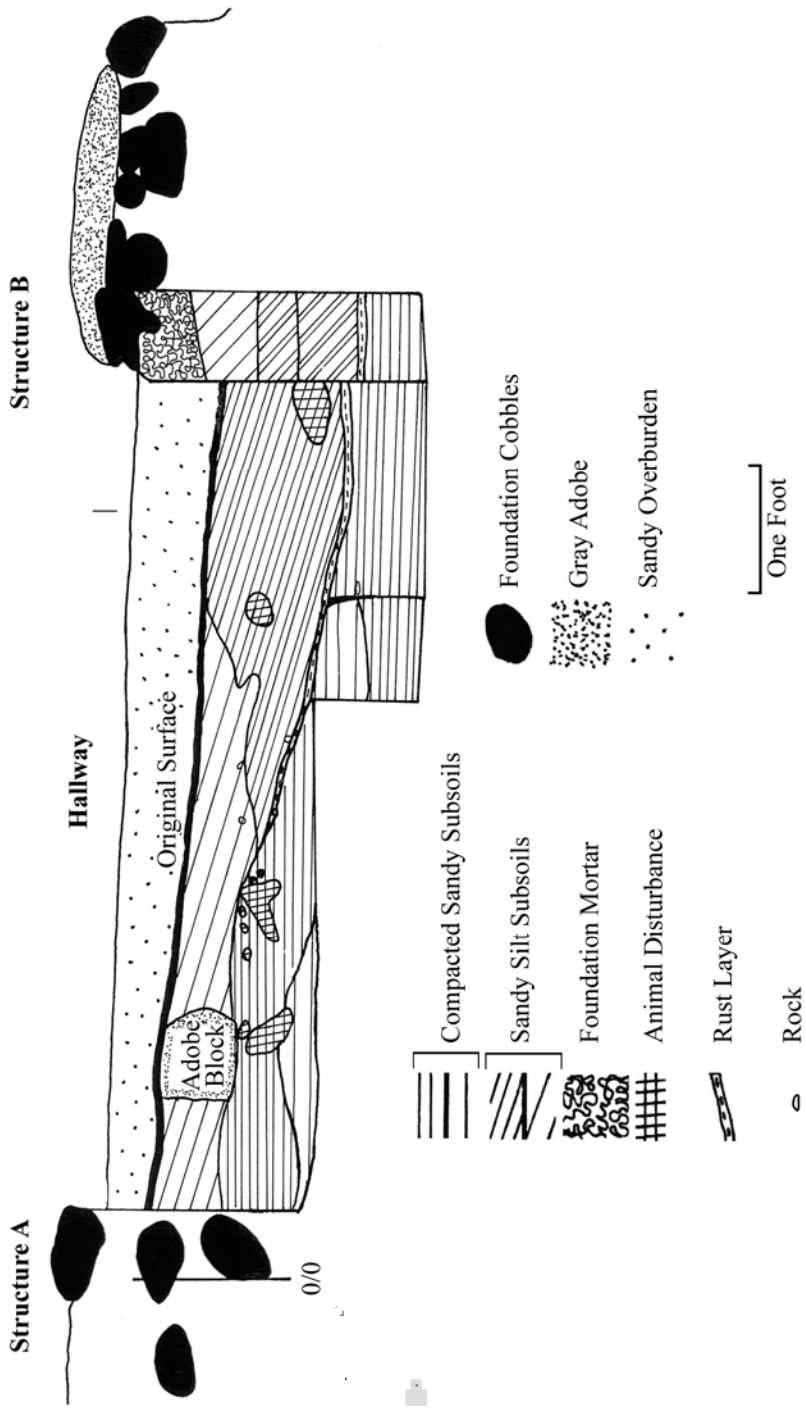


Figure 52. Hallway West Wall Profile of Units N6/E6 and N12/E6.



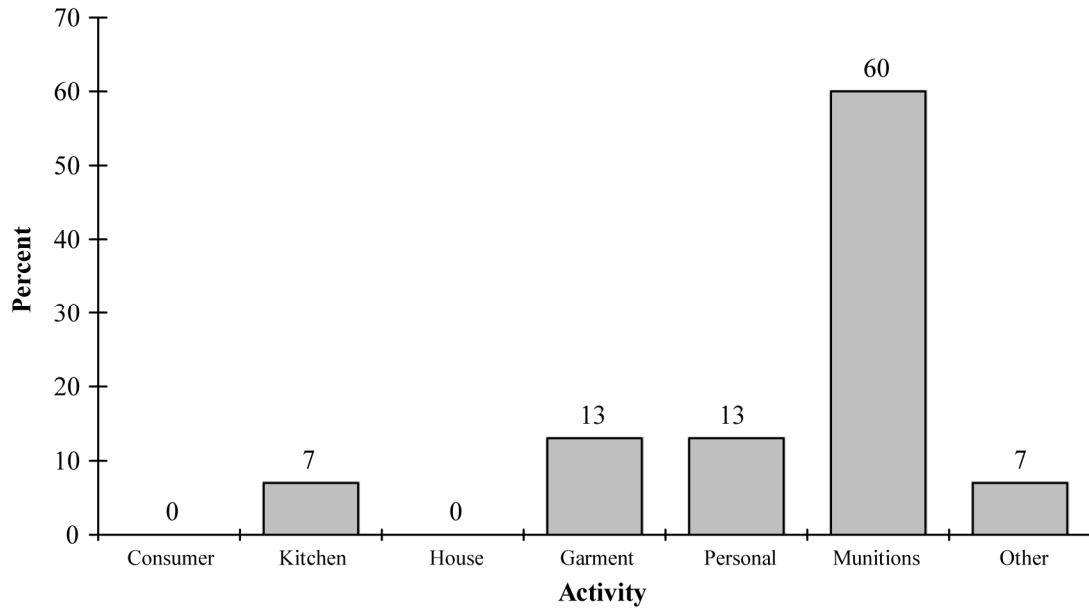


Figure 53. Hallway Activity Profile without Building Materials.

Table 14. Hallway Activity Profile.

ACTIVITY	QUANTITY	PERCENT
Munitions	9	18.00
Personal	2	4.00
Kitchen	1	2.00
Building	35	70.00
Garment	2	4.00
Unidentified Item	1	2.00
Total	50	100.00

Table 15. Hallway Activity Profile without Building Materials.

ACTIVITY	QUANTITY	PERCENT
Munitions	9	60.00
Personal	2	13.33
Garment	2	13.33
Unidentified Item	1	6.67
Kitchen	1	6.67
Total	15	100.00

## **Feature B1**

A dense, fine, dark brown ash layer around eight inches thick was encountered along the northern side of Structure B in Trenches B-1 and B-2 (see Figure 51b). No artifacts or other cultural material were recovered. The deposit represents something that burned against this side of the building, but no clues were encountered to identify its original nature.

## **Structure and Feature Summary**

In summary, the remains of three main structures and a number of distinct features were encountered. Structure A was a two-room, rectangular adobe building that measured 30 feet east-west, by 18 feet north-south. A single adobe block interior dividing wall separated the dwelling into two rooms. Excavation revealed remnant adobe wall segments, cobble foundation alignments, sections of articulated wall fall, and floors constructed of small cobble pavements covered with silty clay. The erosional gully cutting through the site had impacted the northwest corner of the Structure A ruin and completely destroyed about one-eighth of the building's remains. Artifact analysis suggested that the east room may have been a sleeping room where garments, personal belongings, and weapons were stored, while the west room may have served as a kitchen and dining room, where meals and beverages were prepared and consumed. These different activities explain the higher number of artifacts in the east room where a wider variety of items would have resulted in greater loss.

Like Structure A, Structure B was a rectangular building measuring approximately 30 feet north-south by 18 feet, east-west. There were no remains of interior divisions. Prior to excavation, Structure B consisted of an almost level terrace on the north side of the erosional gully. This is the area that had been graded by Buster McCain in 1958. Close to forty percent of what remained of the ruins, after Buster had flattened them, was later destroyed by erosion when the earthen dike overflowed. The channel took away most of the southern edge and east end of the building, leaving a small segment of the southeast corner isolated on its south bank, and the remaining portion of the building on the north side. Extremely shallow wall remains occurred at about 16 inches below the surface, resting on cobble foundations. A burned, packed earthen floor within the perimeter of the walls was found about 24 inches below the surface. Artifact analysis, along with a sooty, scorched earthen floor, and a small hearth designated Feature B5, reveal that this building was used as a kitchen, although garment items, personal items, and munitions show that other activities also occurred there.

The seven-foot-wide passageway between Structures A and B was formed when Structure B was constructed. Although largely destroyed by the erosional channel, approximately eight feet of the former hallway area was still intact on the south bank of the gully, at the eastern edge of the site. Excavation encountered the original compacted surface between the buildings under three to nine inches of a loose sandy overburden. A variety of artifacts were recovered on and above this surface including fragments of Native American pottery, percussion caps, a hard rubber comb, and square nails. Most notable were 195 grams of window glass, indicating that there was a window in one of the buildings at this location. No artifacts were recovered below the packed surface.

Structure C consisted of the remains of a wattle and daub building discovered underneath the floor of Structure B. Evidence included alignments of small ocotillo or willow stake post holes and two small cobblestone hearths.

Structure D included two rectangular alignments of adobe blocks encountered on the west side of Feature B2. These appeared as a thin lens of gray clay one to two inches thick and about 24 inches wide. The true nature of these remains has not been determined. They may represent the adobe corral that adjoined the station buildings that was observed by the Conklings in the 1920s.

Significant features located around the three main structures included A1, A2, B1, B2 and B4. Features A1 and A2 represented a small trash scatter on the west side of Structure A. Feature B1, a dense, fine, dark brown ash layer resembling disarticulated lengths of wood around eight inches thick, was encountered along the northern side of Structure B in Trenches B1 and B2. No artifacts or other cultural material were recovered. The deposit represents something that burned against this side of the building but no clues were encountered to identify its original nature. Feature B2 was a rectangular-shaped ash lens, approximately one inch thick that measured seven by 14 feet. It consisted of a thick, dark brown, wood ash that had an exceptionally high number of square nails and barley seeds. The feature seems to represent a wooden structure that was used for feed storage.

Feature B4 was a trash pit located six feet northwest of Structure A. This dump had originally extended further to the south and had been partially destroyed by the erosional channel bisecting the site. The deposit was 12 to 24 inches below the present ground surface and extended westward under the earthen dike built by Buster McCain, where it was covered by more than four feet of soil. Datable items from the feature are listed in Table 7. There are no introduction dates after 1857 and a variety of items that were not manufactured after 1860 and 1864. This would suggest a deposition date of the late 1850s or early 1860s and corresponds nicely with the operation dates of the Overland Mail from 1857 to 1861. A wide variety of cultural material was recovered, including large quantities of metal, butchered bone, ceramics, Native American pottery, munitions, garment items, and bottle glass.



# ***Chapter 7: Artifact Identification***

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## **INTRODUCTION**

A total of 39.972 kilograms of historical material was recovered from the excavation. Analysis resulted in the identification of an estimated minimum number of 2,266 items representing 14 of the 20 activity group categories listed in Table 2.

## **CONSUMER ITEMS**

Consumer items consist of packaged items purchased and consumed on a regular basis. Generally these include groceries, cosmetics, medicines, and beverages. Under most conditions consumer items found in archaeological deposits came in containers that do not deteriorate over time such as glass or ceramic bottles and jars, and in some instances, tin cans.

A total of 41 consumer items made up 1.81 percent of the collection. This activity group included remains of two tin cans and 39 glass and ceramic containers. The type and size of the cans could not be identified due to their fragmented condition. The products represented by the glass and ceramic containers are listed in Table 16 and discussed below. All are typical of bottles and jars used in the mid-nineteenth century prior to 1880. Most were broken and identification of individual items was made through an analysis of bases, necks, and embossed pieces.

### **Soda Water Bottles**

A single soda water bottle that held from 6 to 8 ounces was identified. This bottle was blown in a full height mold and had a blob top neck finish (Figure 54a).

### **Liquor Bottles**

A minimum of three ale or porter bottles were represented by bases that exhibited dome shaped kickups and necks with collar and ring lip finishes formed by shear style lipping tools. The bottles had been squat, cylindrical containers around eight to 12 inches in height and three to four inches in diameter, with flattened shoulders and long necks. Known as junk bottles, vessels of this type were commonly used for hop beverages such as ale, porter and beer, although they sometimes held such diverse products as wine, cider, and flavoring extracts. The bottle style was adopted in both England and the United States sometime between 1800 and 1815 and

Table 16. Bottled Products.

TYPE AND PRODUCT	PRODUCT		TYPE	
	COUNT	PERCENT	TOTAL	PERCENT
<b><i>Soft Drink</i></b>	-	-	1	2.56
Soda	1	100.00	-	-
<b><i>Liquor</i></b>	-	-	14	35.90
Absinthe	1	7.14	-	-
Ale - Junk Bottle	3	21.43	-	-
Champagne	1	7.14	-	-
Gin	3	21.43	-	-
Wine	1	7.14	-	-
Wine - Bordeaux	4	28.57	-	-
Wine - Hock, Rhine Wine	1	7.14	-	-
<b><i>Culinary</i></b>	-	-	13	33.33
Condiment	5	38.46	-	-
Condiment - Pickle Jar	3	23.08	-	-
Olive Oil	1	7.69	-	-
Pepper - Spice	3	23.08	-	-
Pepper Sauce	1	7.69	-	-
<b><i>Pharmaceutical</i></b>	-	-	1	2.56
Unidentified	1	100.00	-	-
<b><i>Household</i></b>	-	-	1	2.56
Ink	1	100.00	-	-
<b><i>Toiletry</i></b>	-	-	1	2.56
Tooth Paste	1	100.00	-	-
<b><i>Unidentified</i></b>	-	-	8	20.51
Total	-	-	39	100.00

remained popular through the middle of the nineteenth century (McKearin and Wilson 1978:215-217, 229-232; Switzer 1974:16-21). The bottles were manufactured in dip and three-piece molds. One exhibited the mark of a sand-coated pontil. The others lacked pontil marks suggesting the use of a snap case.

Eight wine bottles included Bordeaux, Champagne, and Hock - Rhine wine style vessels (Figure 55a). One container was too fragmented to identify a specific type. Based on examination of fragments, four Bordeaux and single Rhine Wine containers were blown in shoulder-height dip molds and have sheared necks with laid-on rings. One exhibited a sand pontil mark. A partial shoulder seal from one Bordeaux bottle was too small to be identified. The shoulder seal on a fifth Bordeaux-style bottle read "E. PERNOD A. COUVET," indicating it contained absinthe, a product of Switzerland (Schulz et al. 1980:33-34). The Champagne bottle base had a pontil mark and the neck was finished with a lipping tool.



(a) Soda Bottle, #944 (by Sam Webb, 2004).



(b) Spice Bottle, #961 (by Sam Webb, 2004).

Figure 54. Soda Bottle and Spice Bottle.

Three gin containers were identified (Figure 55b). Two were typical “case gin” bottles with flat, tapered sides and sharply rounded shoulders. They were blown in shoulder-height dip molds and had flat lip finishes formed with a lipping tool. Both bottles were embossed J. T. Daley Club House. This popular brand was manufactured in New York and sold from 1857 to 1885 (Schulz et al. 1980:25).

### Food Containers

A minimum of 13 food containers represented a limited range of products and container styles. Five condiment bottles, identified largely through fragments of wide mouth laid on ring “packer” style neck finishes, were the most common. Two cathedral-style jars were blown in two-piece molds. One had a blowpipe pontil mark. A variety of products were sold in these “packer” condiment and cathedral-style jars including horse radish, brandied fruit, pickles, mixed pickled vegetables and spices, honey, preserves and jellies, and tamarind fruit (Switzer 1974:44-56, 64, 66). Three octagonal, paneled pepper or spice bottles were manufactured in full-height, two-piece bottom-hinge molds with hand-finished lips (Figure 56a). One of these containers also had a blowpipe pontil mark. Fragments of a cathedral-style pepper sauce bottle manufactured in a full-height mold were also identified (Switzer 1974:57-60, 63).



(a) Wine Bottle Fragments, #5 and #1022 (by Sam Webb, 2004).



(b) Gin Bottle Fragments, #972 and #973 (by Sam Webb, 2004).

Figure 55. Wine Bottle and Gin Bottle Fragments.





*(a) Condiment Bottle Fragments, #964 (by Sam Webb, 2004).*



*(b) Tooth Powder Jar, #700 (by Sam Webb, 2004).*

Figure 56. Condiment Bottle Fragments and Tooth Powder Jar.

### **Pharmaceutical Bottles**

A clear rectangular pharmaceutical style paneled bottle with a hand finished lip was the only medicine container identified.

### **Toiletry Products Containers**

The single toiletry container consisted of a shallow, white, glazed earthenware toothpaste jar (see Figure 56b). The transfer printed identification proclaimed “SEVEN HIGHEST PREMIUMS / AWARDED / ALSO / A / PRIZE-MEDAL / AT THE / WORLD’S FAIR / LONDON 1851 / TO K. BAZIN. / PHILADELPHIA.

### **Household Products**

One “umbrella”-style inkbottle with a blow pipe pontil mark on the base was the only household product identified.

### **Unidentified Bottles**

Products for at least eight fragmented containers represented by side- panels and hand-finished lip fragments could not be identified.

## **KITCHEN ITEMS**

Kitchen items made up 2.69 percent (61 items) of the artifacts recovered. These consisted of articles used in food preparation, storage, serving, and consumption. Ceramic kitchen and tableware vessels, glass tableware, Native American pottery, table utensils, fruit pits, and 18.417 kilos of butchered bone were recovered. Ceramic kitchen and tableware objects were divided into two categories: serving vessels and table setting dishes, and utilitarian items. Analysis used the vessel typology developed by Worthy (1982). Decorative elements were analyzed for use in economic scaling calculations. Ceramic price scaling uses an indexed scale, based on cost relationships between types of decorative wares for a given time period to determine the relative value of a ceramic assemblage (Miller 1980).

Ceramic kitchen items and types identified are listed in Table 17 and Table 18. Glass tableware consisted of two fluted pressed glass tumblers (Figure 57a). Other kitchen remains included a teaspoon (Figure 57b), 15 grams of eggshell, four peach pits, a plum/prune pit, and two unidentified seeds. Discussions of decorated ceramic types, Native American pottery and the butchered bone are provided below.

### **European Ceramic Decorative Types**

European manufactured kitchen ceramics produced during the use of the Carrizo Stage Station exhibited a variety of styles that included undecorated items, and decorated forms including molded, hand painted, transfer printed, and Rockingham earthen wares, as well as porcelains. None of the ceramics in the assemblage appears to have been made in the United States.

A brief description of some of the earthenware pastes used to make ceramic pieces is appropriate here. Pearl ware is a white body with transparent glaze that has a distinctive bluish tint in parts where the glaze is applied thickly, as in molded parts or around a foot or rim. Pearl ware was available to the American market as late as 1865 “as a moderate-priced



*(a) Faceted Glass Tumbler Fragments, #975 (by Sam Webb, 2004).*



*(b) Teaspoon, #751 (by Sam Webb, 2004).*

**Figure 57. Glass Tumbler Fragments and Teaspoon.**

Table 17. Ceramic Serving Vessels.

ITEM	TYPE	COUNT
Lid To Mustard/Jelly Jar	Molded	1
Relish Dish	Molded	1
Tureen	Molded	1
Pitcher	Hand Painted	1
Pitcher	Rockingham	1
Lid To Sugar Bowl	Molded	1
Unidentified Flat Vessel	Hand Painted	1
Unidentified Hollow Item	Transfer-Flow Blue	1
Unidentified Hollow Vessel	Undecorated	1
Total		9

Table 18. Ceramic Tableware.

ITEM	TYPE	COUNT
Plate, Small	Hand Painted Floral Polychrome	1
Plate, Large	Undecorated	1
Plate, Large	Molded	4
Plate, Unknown Size	Transfer-Red	1
Soup Plate	Undecorated	1
Cup	Undecorated	1
Cup	Porcelain	1
Cup, No Handle	Hand Painted Floral Polychrome	5
Saucer	Undecorated	3
Saucer	Hand Painted Floral Polychrome	4
Saucer	Porcelain	1
Saucer/Bowl	Undecorated	1
Total		24

ware for ordinary use” (South 1977:212; Hume 1978:49, referenced by Felton and Schulz 1983:29). Felton and Schulz state that in their collection from the Diaz Adobe in Monterey “Many of the Diaz collection vessels demonstrate blue - tinted glaze over both decorated and undecorated bodies” (1983:29). In the Carrizo Stage Station collection only two items, a hand painted saucer and a pitcher, had this blue puddling. However, several decorated items had evidence of a bluish cast. This bluish cast is not the same as the blue puddling, according to Miller (Miller 2003).

Preceding pearl wares but also contemporaneous with it, was cream ware, which is distinguished by its transparent lead glaze with greenish yellow tint in the puddled areas. Note that pearl ware and cream ware pastes are present in both undecorated and decorated items described below.

## **Undecorated White ware**

Undecorated kitchenwares were prominent in the Carrizo collection. Plain, heavy pieces were often manufactured specifically for heavy usage, as expected in hotels and boarding houses. Eight undecorated kitchen items were found in the Carrizo assemblage, including one unidentified hollowware vessel, a large plate, a soup plate (Figure 58a), a teacup, and four saucers. None were marked.

## **Hand Painted**

Ten vessels were hand painted; all had some evidence of a bluish cast to the clear glaze, if not outright puddling. The most common pattern was found on five handleless teacups (one is complete and undamaged) and three saucers of thin earthenware (Figure 58a and Figure 59a). This consists of a sprigs style floral decoration, with red and blue four-petaled flowers and small buds that have black stems and bright green leaves. Another pattern is represented by one saucer decorated with dull olive green leaves. A third design is on a small plate; it has three-petaled red tulips with light green leaves. These two patterns may also be sprigs designs; however they were catalogued as hand-painted polychrome floral pieces, as they were not seen depicted in any of the references on sprigs designs. Also, there is a pitcher fragment that is trimmed with red lines accenting a molded design, and an unidentified flat vessel with red lines around the rim (Figure 60b). These two vessels possibly constitute serving pieces to one of the three patterns described above.

The term “Sprigs” refers to a specific style of design. There were varying patterns, all including floral or vegetal elements. The colors were applied over the clear glaze, as enamels, and were very hardy; they rarely seem to be worn off. This style of decoration was used on a variety of wares including fine, translucent porcelain, and various semi-porcelains. They are not marked. The period of use was from the early 1800s into the mid nineteenth century, and “finally went out of fashion” in 1860 (Wood 1959:29, 34, 88-89).

## **Molded Ironstone**

Molded ceramics became very popular in the mid-nineteenth century as a reaction to the brightly colored, transfer-decorated tablewares, that were prominent during the 1830s and 1840s. Utilizing simple shapes with molded surface decoration and no color, these gleaming white plates were eagerly bought and proudly used by American households (Wetherbee 1985).

The period of greatest popularity for molded wares extended from the 1840s through the early 1890s; gothic shapes were the first produced. During the 1860s and 1870s, floral and vegetation designs were in style, followed by rectangular shapes into the 1880s. The sales of molded “ironstone” decreased as a result of improvements in the production and, therefore, also the reduction in price, of porcelain (Bagdade and Bagdade 1991:160-161).

Carrizo Stage Station assemblage kitchen item molded wares included a lid to a mustard/jelly jar (Figure 59b), a tureen, a sugar bowl lid (Figure 59b), four large plates, and a relish dish. The relish dish and large plate exhibit a bluish cast to the glaze, and the lid has a greenish cast. The only item identifiable as to a pattern is the sugar bowl lid; it is named “Wheat”, and was produced by a manufacturer that is speculated to be Furnivals. Wheat was produced during the 1860s (Freeman 1954:22; Praetzellis et al. 1983:36; Wetherbee 1985:80).



(a) *Soup Plate Fragment, #710B (by Sam Webb, 2004).*



(b) *“Sprigs” Decorated Handleless Tea Cup, #727 (by Sam Webb, 2004).*

Figure 58. Soup Plate Fragment and Tea Cup.

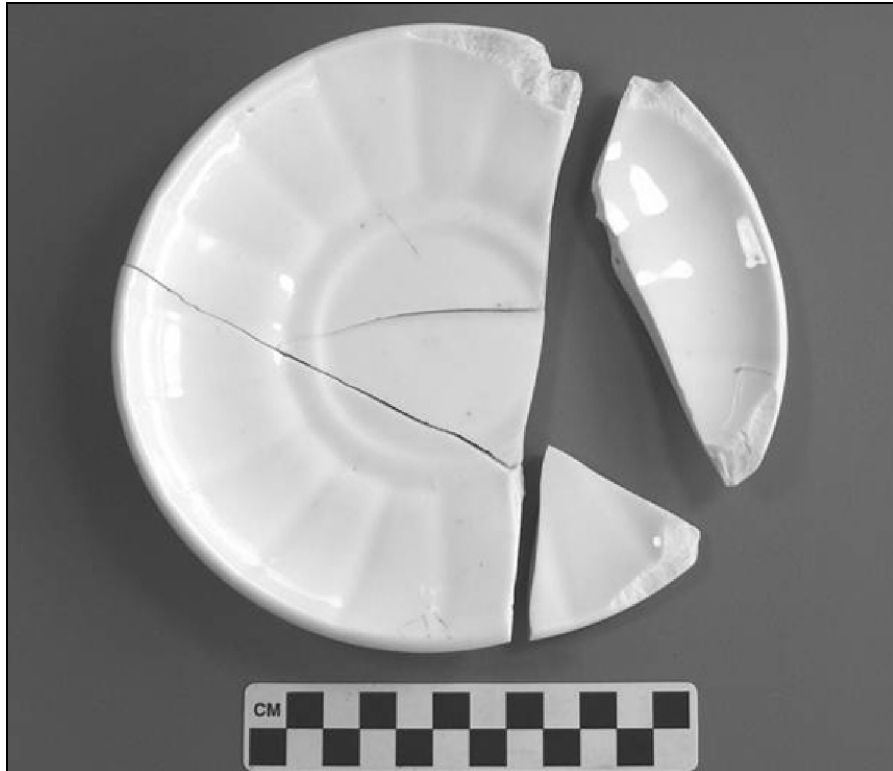


(a) “Sprigs” Decorated Cup Rim, Cup Base, Saucer Fragments, #731, #739, #732A (by Sam Webb, 2004).



(b) Sugar Bowl Lid, Mustard Jelly Lid, #725 and #703 (by Sam Webb, 2004).

Figure 59. Cup, Saucer, and Sugar Bowl Fragments.



(a) *Molded Ironstone Saucer Fragments, #702A (by Sam Webb, 2004).*



(b) *Hand Painted and Rockingham Pitcher Fragments, #739A, #742, #740B, (by Sam Webb, 2004).*

Figure 60. Molded Ironstone Saucer and Rockingham Pitcher Fragments.



One plate was identified as the same design as was found in Old Town San Diego at the Aguirre Adobe. It has a round rim with an impressed pattern of concentric, slightly curved lines that originate at the edge of the rim and extend in about one half inch, with blue puddling in that area. In most plates of this pattern, the molded area is colored, generally cobalt blue, but sometimes green or yellow; and is commonly referred to by archaeologists as edge decorated, feather edge, or shell edge. This plate, like the ones from the Aguirre Adobe, is unusual in that it is plain white and does not have the added colored glaze over the molded edge pattern.

Edge decorated vessels were the least expensive and most common of all the decorated wares available in America and had a long period of usage, beginning with cream wares in the mid 1770s. Edge decorated wares continued to be manufactured as late as 1859 on pearl wares. These wares are rarely found in archaeological sites after 1870 (Miller and Hunter 1990).

### **Transfer Decorated**

Another major technological change during the late-eighteenth century was an innovation in surface decoration popularized by Spode, but quickly copied by many other successful manufacturers. The new technique is now called transfer printed ware. Initially, transfers were applied over the glaze, but by the first half of the nineteenth century, underglaze designs became tremendously popular. The inexpensive cost and ease of application enabled potters to decorate their vessels with elaborate patterns that could easily be applied by unskilled workers (Bagdade and Bagdade 1991:99-100). The process speeded up the production of decorated wares and allowed the English to begin selling them at even lower rates, further cementing their dominance of the ceramic market. Blue was the original color used in transfers, as it was initially the only color that could withstand the high temperatures of the kiln when the vessels were fired. Experimentation with other coloring agents later produced black, brown, green, lavender, mulberry, pink, purple, orange and red. The popular range of production for all colors spans from 1784 to 1895 (Samford 1997:20); however, transfer patterns are still being produced today.

Flow blue, a blurry form of transfer decoration, was initially developed by Wedgwood in the 1820s. Flow blue (and other flowing colors) was considered an appealing new way to produce transfers and went into and out of style. Early flow blue pieces were fashionable from 1835 into the 1850s, then reappeared from the 1860s for about a decade until the 1870s. The last period of popularity for flow blue was from the 1880s until about 1900 (Bagdade and Bagdade 1991:104-105). Another source notes two periods of popularity for flow blue from the 1840s and 1850s, then from the 1890s until about 1904 (Samford 1997:24).

Although extremely popular during the mid-nineteenth century, transfer wares were some of the least represented at the Carrizo Stage Station and included only a few sherds of a flow blue unidentified hollow vessel and one small rim piece of a red "Aladdin" pattern plate produced by John Ridgeway from 1830 to 1855 (Williams 1978:89; Snyder 1997:140).

### **Rockingham Ware**

The fragments of a single pitcher represent the only Rockingham ware vessel identified at the Carrizo Stage Station (see Figure 60b). It has a cream colored paste and a

partial molded design of grapes, berries, or hops. Rockingham ware has a very distinctive brown mottled appearance that was achieved by applying manganese to a clear glaze. Several methods, including sponging, dripping, splattering, or brushing were used to apply the pigment. Rockingham ware was particularly utilized for utilitarian kitchenware, serving pieces, and household items.

The earliest Rockingham ware was produced about 1785 in Yorkshire, England. It was named after the Marquis of Rockingham, who financially aided one of the major producers of this ware. As its popularity increased, other countries began to manufacture it. American Rockingham is believed to have started in New Jersey in the early 1820s. By 1835, nearly every large pottery was in production of Rockingham ware (Brewer 1996:10-11). Much, but not all, Rockingham was made with a yellow ware body; some was made with a stoneware base (Brewer 1996:8-9).

### **European Porcelain**

Porcelain originated in China. The Chinese, to maintain their dominance in the trade, kept the manufacturing formula secret. Eager to reproduce this lovely translucent ware, European ceramists experimented and England, by the mid-1700s, produced soft paste porcelain. Soft paste porcelain, though beautiful, was fragile. It was unable to hold hot liquids, for instance, pouring tea into a cup could crack it. New formulas resulted in a true hard-paste durable porcelain. Hard paste porcelains were developed elsewhere in Europe and were available to the consumer in America (Bagdade and Bagdade 1991:99-100).

A paneled cup and saucer were the only porcelain items from the Carrizo collection and probably represent a matched set. They are very heavy and probably were meant for the hotel ware trade.

### **Native American Items**

The Native American pottery sherds and ground stone were analyzed by archaeologist Sue Wade. The attribution of these items to the historic occupation of the site is somewhat complicated by the fact that a prehistoric site is located to the west on the mesa top above the stage station and that occasional prehistoric stone artifacts were also observed in the stage station site area. However, given that only one potsherd was observed at the prehistoric site on the mesa and that the majority of the pottery remains recovered during the stage station site excavations are large specimens of identifiable vessels associated with discrete features or structures in historic contexts, it is likely that only a few prehistoric sherds, at most, were incorporated into the historic site deposit during its construction and use. As well, the ground stone implements described below were directly associated with the two historic hearth features (C-1 and C-2) in Structure C. (This situation is in contrast to the random distribution across the site of a small collection of prehistoric flaked and water-worn ground stone artifacts recovered during the investigations.)

### ***Pottery***

A total of 1,038 grams of pottery (312 sherd fragments) was recovered. The total includes 41 grams (4.0%) from Structure A (37 grams from the east room and 4 grams from the west room), 152 grams (14.6%) from Trash Feature A1, 210 grams (20.2%) from Trash Pit Feature B4, 439 grams (42.3%) from Structure B, 151 grams (14.5%) from the Hallway, and 45 grams (4.3%) recovered from the erosional gully.

A minimum number of 19 vessels were identified in the sherd collection. This number was primarily defined by unique rim sherds representing individual vessels but several were also identified by a unique assemblage of body or base sherds. The vessel attributes and proveniences are described in Table 19.

As can be seen in Table 19, all identifiable vessels were open-mouthed pots, both vertical sided and moderately constricted. The vessel openings range nine to 14 centimeters radius (18 to 28 centimeters in diameter). Open-mouthed vessels such as these were desirable in early historic times in remote areas for use in cooking and serving (Wade 2004; Schaefer 1993). No storage vessels with highly constricted-openings, such as water ollas or seed jars, were recovered. Several discrete collections of very thick base or body sherds, having little curvature, were recovered. These may have functioned as platters, *comals* or other food preparation surfaces. Several vessels were purposefully discarded in trash areas: one burned vessel was discarded in Trash Feature A1, and two burned pots, a burned platter, and four unburned pots (two with painted decoration) were discarded in Trash Pit B4. One unidentified vessel was likely discarded into the Hallway. Others appear to have been broken and subsequently incorporated into the structure floor soils. One burned pot and one very thick-walled unidentified vessel were recovered from excavations in the east room of Structure A. Two burned vessels, five unburned vessels (two with painted rims and body), and one thick-walled vessel were recovered from Structure B, supporting the conclusion that this building was used as a kitchen.

Table 19. Recovered Native American Vessel Forms and Associated Data.

VESSEL	ITEM	CAT	UNIT	CONST	MAT	BURN
<i>Structure A – East Room (n=2)</i>						
1	Base Sherd, Very Thick	642.10	N00, W00	P&A	Salton Brown	None
2	Vertical-Sided Pot, Undeterminable Rim Radius	692.10	S12, W06	P&A	Tumco	Sooting
<i>Trash Feature A1 (n=1)</i>						
3	Body Sherds of one vessel	688.10	S06, W30	P&A	Colorado Buff	Sooting
<i>Trash Pit Feature B4 (n=7)</i>						
4	Vertical-Sided Pot, 9 cm Rim Radius, Thin Walled with wipe marks	649.11	N06, W36	99	Tumco	Sooting
5	Moderately-Constricted Pot, 11 cm Rim-Radius	650.31	N06, W36	P&A	Brown ware	Heavy Sooting
6	Vertical-Sided Pot, 14 cm Rim-Radius, High fire/no carbon core	656.10 699.10 699.11	N06, W42	P&A	Unidentified Buff	None
7	Vertical-Sided Pot, 10 cm Rim-Radius, Paint (Red) line on rim	815.10	N06, W42	97	Tumco	None
8	Body Sherds, Very Thick (platter?)	653.30	N06, W42	97	Unidentified Buff	Sooting
9	Vertical-Sided Pot, 9 cm Rim-Radius	643.30	N00, W42	P&A	Brown ware	None

Table 19. Recovered Native American Vessel Forms and Associated Data *continued.*

VESSEL	ITEM	CAT	UNIT	CONST	MAT	BURN
<i>Trash Pit Feature B4 (n=7) continued</i>						
10	Moderately-Constricted Pot, 14 cm Rim-Radius, Painted (Red Rim and Body, Black Rim)	654.10	N06, W42	P&A	Colorado Buff	None
<i>Structure B (n=8)</i>						
11	Undeterminable Form, Undeterminable Rim-Radius, Painted (Red) line on rim and remnants on exterior	651.11	N06, W36	P&A	Colorado Buff	None
12	Undeterminable Form, Undeterminable Rim-Radius, Painted (Red), line on rim similar to 651.11	797.11	N12, W30	P&A	Unidentified Buff	Sooting
13	Body Sherds, very thick walls	665.10 666.10	N18, W12	99	Brown ware	None
14	Body Sherds, Tumco, Stucco Coat exfoliated from burning	669.10	N18, W18	P&A	Tumco	Heavily Burned
15	Neckless Constricted Pot, Buff Clay, very eroded, Undeterminable Rim-Radius	673.10	N21, W18	P&A	Unidentified Buff	None
16	Body Sherds, Buff Clay, Very Coarse Inclusions	676.10	N24, W24	P&A	Unidentified Buff	None
17	Moderately Constricted Pot, Colorado Buff, 12 cm Rim Radius	677.11 678.11 695.10	N24, W30	P&A	Colorado Buff	None
18	Moderately Constricted Pot, Tumco, Undeterminable Rim-Radius sharp angle neck to rim	680.11	N33, W12	P&A	Tumco	Sooting
<i>Hallway (n=1)</i>						
19	Body Sherds, Unidentified Buff	646.11	N06, E00	P&A	Unidentified Buff	None

Although some evidence of burning was observable on the rim sherds as noted above, often evidence of burning is not evident on the upper portions of vessels used for cooking. It is also possible that sooting could occur on portions of vessels not used for cooking as the structure's roof burned on at least one occasion. Unburned sherds include those with no visible evidence of soot as well as those fire clouded during manufacture. Burned sherds include those with minor sooting to heavy soot deposit and crystallization. Table 20 identifies the percentages by weight of burned sherds in the total sherd assemblage.

The burning data would suggest that the Native American pottery discarded in the east room of Structure A and Trash Feature A1 was not used for cooking (because of the small proportion of burned sherds) but may have been affected by the structure roof fire. Proportions of other historic artifacts supported use of the east room of Structure A as a sleeping room. By contrast, the pottery discarded in Trash Feature B4 and Structure B is predominated by burning and attributable to cooking use.

The potsherds are constructed of a variety of clay materials typical for the region. The distribution is shown in Table 21.

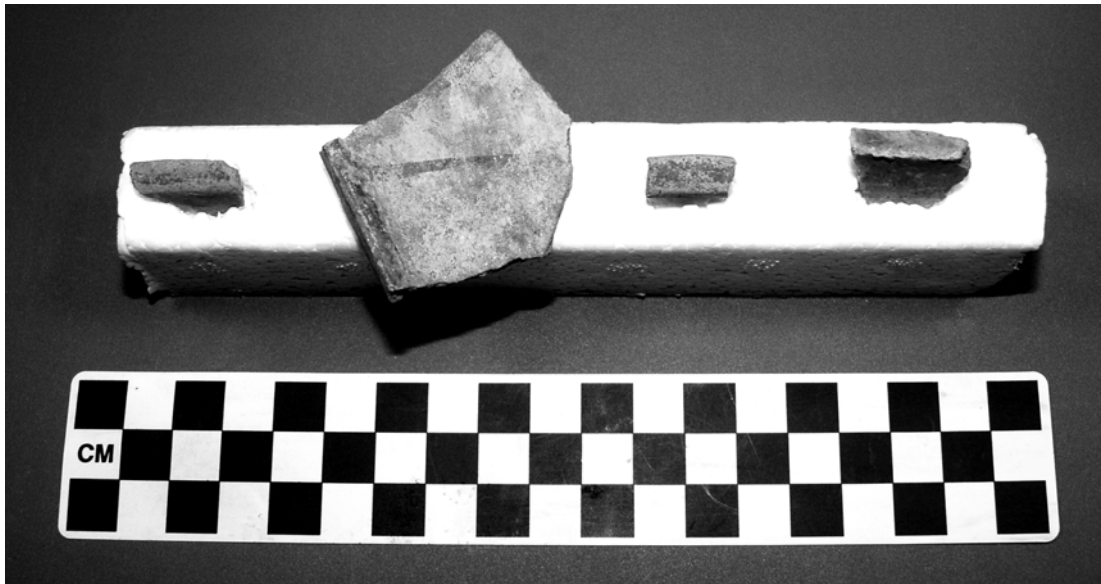
Table 20. Native American Burned Sherd Data.

PROVENIENCE	SHERDS (WEIGHT IN GRAMS)	
	UNBURNED	BURNED
Structure A, East Room	33	4
Structure A, West Room	2	2
Trash Feature A1	99	53
Trash Feature B4	53	157
Structure B	205	234
Hallway	49	102
Gully	32	13
Totals (grams)	473	565
Percentages	46%	54%

Table 21. Native American Sherd Ware Type Data.

WARE	WEIGHT (G)	% TOTAL
Tizon Brown Ware	28	2.7
Lower Colorado Buff Ware	280	27.0
Salton Brown Ware	28	2.7
Salton Buff Ware	8	0.8
Tumco Buff Ware	55	5.3
Unidentified Buff Ware	489	47.0
Unidentified Ware	150	14.5
Total	1,038	100.0

The brown wares originate with residual clays derived from the Peninsular Mountains to the west. The buff wares originate with sedimentary clays from the immediately surrounding desert areas as well as the Colorado River region to the east. Typically, brown wares are more suitable for cooking uses while stucco coatings are applied to buff wares to increase their resiliency to heat. Indeed, one brown ware apparent cook pot in Trash Pit Feature B4 was heavily sooted. Six burned buff ware vessels were also present, one with heavily burned stucco coating. Interestingly, several Lower Colorado Buff Ware vessels were present in the assemblage, three with painted decorations (Figure 61a). Lower Colorado Buff Wares were produced in the latest prehistoric period and into historic times along the Colorado River (Kroeber 1955; Schaefer 1993; Wade 2004). It is likely that these four vessels were manufactured in the Lower Colorado region, sold or traded (perhaps with food contents) to desert travelers, and brought to the site via the Overland Trail. By far, however, the largest proportion of pottery sherds were constructed of unidentified buff clays, some fine-textured and some coarse. It is probable that some were manufactured on



(a) Colorado Buff Ware Painted Rim Fragments, #651, #654, #797, #815 (by Sam Webb, 2004).



(b) Stone Grinding Implements, #91 and #92 (by Sam Webb, 2004).

Figure 61. Painted Rim Fragments and Stone Grinding Tools.

site using locally available clays, perhaps by station master Mailland's Native American wife. Others may be associated with travel along the overland route, perhaps brought to the site as containers of other materials. It is also very likely, given the many travelers' reports of Native Americans traversing the area, that some were trade items or containers for trade items, bartered by the local Native Americans for European goods.

### ***Stone Grinding Implements***

Also indicative of Native American influence on the activities of the stage station, is the presence of two cooking hearth features and associated stone grinding implements in Structure B. Although the hearths contained historic artifacts, these types of hearth features are typical of Native American food preparation methods, as are the stone grinding implements (also known as manos) that were found in association. Each hearth, in addition to fire-affected cobbles, contained two grinding stones. The two in Feature C1 are large: one (2.243 kilograms) is a pestle with grinding on two sides and pounding damage on the ends and the second (1.522 kilograms) is shaped like a crescent with grinding on both flat sides. The pestle is made of locally-available quartz-diorite and the crescent-shaped implement is made of quartzite. The two manos in Feature C2 are smaller and are more typical of traditional prehistoric manos (see Figure 61b). The smaller mano is fashioned from the same quartz-diorite as the pestle in Feature C1 and shows only a small amount of grinding on the edges. The larger is a bifacial-ground mano made of granite. In addition to the manos stored at the hearths, three additional grinding stones were found at the site, one unifacial fragment in the hallway, one bifacial mano in Feature B4, and a unifacial mano fragment in the Feature B4 overburden. These types of grinding stones are typically used by the Native Americans of Southern California for processing seeds and grains into flour. At the stage station they may have been used to grind mesquite beans and other locally available seeds, to pound meat for cooking, or to grind grains imported to the site.

### **Butchered Bone**

The bone was analyzed by Susan Arter of the San Diego Natural History Museum. Bone debris included meat-bearing body elements as well as head and foot elements associated with butchering waste that resulted from the processing of both domestic and wild fauna at the stage station. Domesticated animals represent 39 percent of the identifiable fauna, although they constitute 95 percent of the bone debris by weight. They indicate a reliance on beef and lamb. It is well documented that large herds of these animals were constantly driven along the stage coach route (Brigandi 1995). Cattle provided the bulk of the meat, followed by sheep, and to a much lesser extent pigs and chickens. These animals were butchered on site with saws, cleavers, and knives according to both Euro-American and Mexican butchering traditions and culinary patterns.

Wild species represent 61 percent of the collection with a wide variety of animals including jackrabbits, cottontails, dabbling ducks, geese, storks, willets, and fish. Though minimal by weight, the quantity of specimens indicates the important dietary role that wild fauna played at the site. Jackrabbits and cottontails were probably hunted near the station. The remains of so many ducks and geese is surprising at this remote desert site. They were probably brought in from San Diego Bay and other coastal estuaries or from the Colorado River. It also could have been possible to procure them on the desert southeast of Carrizo Creek on wet years when there was water in the arroyos and small lake beds along the New River.

## HOUSEHOLD ITEMS

Household items constituted 0.22 percent (five items) by quantity of the assemblage. These artifacts include those things that are necessary for the daily maintenance of a household and included fragments of two oil or kerosene lamp chimneys, a writing slate, a pencil lead, and a straight sewing pin.

## GARMENT ITEMS

Garment items made up 3.57 percent (81 items) of the material recovered. This group consists of all the preserved evidence of clothing. Items identified are listed in Table 22 and included shoe parts; suspender hardware; ceramic, shell, and bone buttons (Figure 62a); corset stays and garter hardware (Figure 62b); and pieces of woven cotton fabric. Several items document the presence of women. These include a heavy hook and eye that probably fastened a corset, pieces of metal stays from two different corsets, and two brass shank buttons for women's outer wear garments. Other items, especially suspender hardware and fly buttons, represent the remains of men's working clothes.

Table 22. Garment Items.

ITEM AND TYPE	MATERIAL	ID	REFERENCE	SIZE	COUNT
<i>Hook From Hook and Eye</i>					
-	Brass	-	-	L=13/16" W=5/8"	1
<i>Shoe/Boot Hardware</i>					
Lacing Hook	Ferrous	-	-	-	1
<i>Shoe/Boot Leather</i>					
-	Leather	-	-	Fragment	1
<i>Shoe/Boot Part</i>					
-	Leather	-	-	Fragment	1
-	Leather	-	-	Fragment	1
Eyelet	Brass	-	-	D=1/4"	1
Eyelet	Brass	-	-	D=1/4"	1
Eyelet	Brass	-	-	D=1/4"	2
Eyelets and Shoe Hook	Brass, Ferrous	-	-	Eyelet D=3/8" and D=1/4"	4
Insole Fragment	Rubber	-	-	Fragment	1
Lacing Hook	Ferrous	-	-	Fragment	1
Reinforcement	Leather	-	Grimm 1970:110	Fragment	1
Shoe Hooks	Ferrous	-	-	-	2
Snap	Brass	-	-	D=7/16"	1
Eyelet and Shoe Hook	Brass	-	-	Eyelet D=3/8"	2



Table 22. Garment Items *continued*.

ITEM AND TYPE	MATERIAL	ID	REFERENCE	SIZE	COUNT
<b><i>Suspender Hardware</i></b>					
-	Ferrous	-	-	Fragment	1
-	Brass	-	-	L=1 ½";W=7/8"	1
-	Ferrous	-	-	Fragment	2
-	Brass	-	-	Fragment	1
-	Ferrous	-	-	Fragment	1
-	Ferrous	-	-	Fragment	1
-	Ferrous	-	-	Fragment	1
<b><i>Button</i></b>					
2 Hole	Bone	-	-	D=1/2"	1
2 Hole	Glass	-	Preciado 2002	D=7/16"	1
2 Hole	Shell	-	-	D=9/16"	1
2 Hole	Shell	-	-	D=3/8"	2
2 Hole	Shell	-	-	D=@9/16"	1
4 Hole	Ceramic	-	-	D=@3/8"	1
4 Hole	Ceramic	-	-	D=@1/2"	1
4 Hole	Ceramic	-	-	D=7/16"	1
4 Hole	Shell	-	-	D=@11/16"	1
4 Hole	Ferrous	-	-	D=9/16"	1
4 Hole	Ceramic	-	-	D=@1/2"	1
4 Hole	Shell	-	-	D=1/2"	1
4 Hole	Unidentified	-	-	Oval L=11/16";@W=5/8"	2
4 Hole	Ceramic	-	-	D=7/16"	1
4 Hole	Bone	-	-	D=11/16"	1
4 Hole	Bone	-	-	D=1/2"	1
4 Hole	Ceramic	-	-	D=3/8"	1
4 Hole	Ceramic	-	-	D=7/16"	1
4 Hole	Ceramic	-	-	D=7/16"	2
4 Hole	Shell	-	-	D=3/8"	1
4 Hole	Shell	-	-	D=3/8"	1
5 Hole	Bone	-	-	D=5/8"	2
5 Hole	Bone	-	-	D=5/8"	1
Shank	Brass	-	-	D=3/4"	1
Shank	Ferrous	-	-	D=9/16"	1
Shank, Metal Add On	Brass, Ferrous	-	Preciado 2002	D=1 3/8"	1
Shank, Metal Add On	Brass	-	Preciado 2002	D=1 1/4"	1
Shank, Metal Add On	Brass, Ferrous	-	-	D=1 7/16"	1
Fly	Ferrous	-	-	D=9/16"	2
Fly	Ferrous	-	-	D=5/8"	4

Table 22. Garment Items *continued*.

ITEM AND TYPE	MATERIAL	ID	REFERENCE	SIZE	COUNT
<b>Button continued</b>					
Fly/Jeans Button	Brass	*	-	D=11/16"	3
Fly/Jeans Button	Brass, Ferrous	-	-	D=3/4"	2
Fly/Jeans Button	Brass, Ferrous	-	-	D=11/16"	1
<b>Collar Button</b>					
-	Brass	-	-	Fragment D=5/16"	1
-	Shell	-	-	Oval L=1/2;W=3/8"	1
<b>Corset Stay</b>					
-	Ferrous	-	-	W=3/8 And W=1/4"	2
-	Ferrous	-	-	W=3/8"	1
<b>Garter Hardware</b>					
-	Brass	-	Preciado 2002	Fragment	1
<b>Scrap of Fabric</b>					
Woven Cotton	Fabric	-	Preciado 2002	Scrap	1
Woven Cotton	Fabric	-	Preciado 2002	Scrap	1
Total					81

Notes: \* "The / Boss / Union Made"; Embossed on Upper Surface.

## PERSONAL ITEMS

Personal items are defined as the possessions of a specific individual. These artifacts made up 1.72 percent (39 items) of the historic material recovered. The artifacts are listed in Table 23 and represent a wide variety of articles including four bone and hard rubber hair combs; an eye glass lens; two wood and pewter lace making bobbins; 17 collected mineral specimens of petrified wood, black tourmaline, chalcedony, and "desert rose" crystals; a straight razor; a bone tooth brush; a hard rubber tooth pick, and one bone and ten clay smoking pipes (Figure 63 and Figure 64a).

## MUNITIONS AND ARMS

Munitions and arms made up 4.81 percent (109 items) of the artifact collection and were the most numerous single type of artifact except for building materials (Table 24). These items represented muzzle loading arms in widespread use in the mid-nineteenth century. The most common articles identified were 89 percussion caps that included sizes for both hand guns (#10) and rifles (#11). Three gun flints attest to the continued use of flint lock arms in the area through the 1860s. Projectiles included .38 caliber and .45 caliber lead round balls (Figure 64b). The former were common sizes for percussion revolvers, while the .45 caliber ball could have been used for a revolver or rifle. Two rifle barrel segments were identified; one represented a double barreled weapon (Figure 65a).



(a) Buttons, Milk Glass, Bone, Hard Rubber, Brass Shank, #510, #525, #535, #522 (by Sam Webb, 2004).



(b) Corset Stays, Garter Clasp, #558, #559, #546 (by Sam Webb, 2004).

Figure 62. Buttons and Garment Fasteners.



(a) Combs (Bone, Hard Rubber), Toothbrush Handle, #497, #496, #494 (by Sam Webb, 2004).



(b) Lace-Making Bobbins, Straight Pin, #483, #484, #460 (by Sam Webb, 2004).

Figure 63. Combs, Bobbins, and Straight Pin.



(a) Clay Pipes, #490, #488A, #492, #786, #485, 788B, 788A (by Sam Webb, 2004).



(b) Gun Flints, Percussion Caps, Civil War Mini Ball, Buckshots, 30-Caliber Lead Balls, 44/45 Caliber Lead Ball, #450, #87, #86, #47, #64, #76, #73, #74, (by Sam Webb, 2004).

Figure 64. Clay Pipes and Munitions.

Table 23. Personal Items.

ITEM AND TYPE	MATERIAL	TECHNOLOGY	PATTERN	SIZE	COUNT
<b>Comb</b>					
-	Hard Rubber	-	Black	Segment 1 5/16" In Length	1
Fine Tooth	Bone	-	-	Fragment	1
Lice Comb	Bone	-	Undecorated	Segment 1 5/16" In Length	1
<b>Comb Tooth</b>					
-	Hard Rubber	-	Black	Fragment	1
<b>Eyeglass Lens</b>					
-	Glass	-	-	Fragment	1
<b>Lace Making Bobbin</b>					
For Making Bobbin Lace	Pewter **	-	-	Broken L=1/2"; D=3/16"	1
For Making Bobbin Lace	Wood **	-	-	Broken L=1 7/8"; D=3/16"	1
<b>Mineral Specimen</b>					
Collected Item	Petrified Wood	-	-	-	8
Collected Item	Desert Rose	-	-	-	1
Collected Item	Petrified Wood	-	-	-	1
Collected Item	Coarse Granite	-	-	-	3
Collected Item	Black Tourmaline W Schist	-	-	-	1
Collected Item	Desert Rose	-	-	-	1
Collected Item	Desert Rose	-	-	-	1
<b>Rock Specimen</b>					
-	Chalcedony	-	-	-	1
<b>Smoking Pipe</b>					
-	Bone	-	-	Fragment	1
-	Ceramic	-	Molded Circular Designs Near Rim	D=1"	1
Red Clay	Ceramic	-	-	Fragment	1
Rockingham Glaze	Ceramic	-	-	Fragment	1
Threaded Inside	Wood	-	-	D=1";H=9/16"	1
<b>Smoking Pipe Bowl Fragment</b>					
Clay Pipe	Ceramic	-	Unglazed White Clay	Fragment	1
Clay Pipe	Ceramic	Molded	Clear Glazed Red Clay	Exterior D=1"	1

Table 23. Personal Items *continued*.

ITEM AND TYPE	MATERIAL	TECHNOLOGY	PATTERN	SIZE	COUNT
<b><i>Smoking Pipe Bowl Fragment continued</i></b>					
Clay Pipe	Ceramic	Molded	Unglazed Red Clay	Exterior D=1"	1
Clay Pipe	Ceramic	Molded	Unglazed Black Clay	Exterior D=1"; and 1/2"	1
Clay Pipe	Ceramic	Molded	Clear Glazed Red Clay	Exterior D=3/4"	1
<b><i>Smoking Pipe Stem Fragment</i></b>					
Clay Pipe	Ceramic	White Clay	-	Broken L= 1 5/8"	1
Clay Pipe	Ceramic	-	White Clay	Broken L= 3/4"	1
<b><i>Straight Razor</i></b>					
-	Brass, Ferrous, Bone, Wood	-	-	L=@4";W=@3/4"; Th=@7/16"	1
<b><i>Toothbrush</i></b>					
-	Bone *	-	-	Broken L=4 1/16"; W=9/16";Th=1/4"	1
<b><i>Toothpick</i></b>					
Reusable	Hard Rubber	-	Black	Broken L=1 1/4"; W=3/16";Th=1/16"	1
Total					39

Notes: \* ID: "Schapper & Roberts / Philadelphia"; Also "L" Inside A 6 Pointed Star; Cut or Impressed into the Handle. \*\* Reference: Thompson 1997:106-108.

The munitions recovered from the ruins of the Carrizo Stage Station represent a change in arms technology that had occurred during the early nineteenth century. Since the mid-1600s, pistols and rifles had used a flintlock ignition system. At its most basic, a flintlock fires when the trigger is pulled and the hammer strikes a stone piece against a steel plate called a frizen, causing sparks to fall on a charge of gunpowder, which ignites and shoots the gun. During the early nineteenth century, the flintlock began to be replaced by the percussion lock. Rather than depend on flint striking steel to achieve ignition, this device used a small hollow brass cap coated on the interior with a fulminating powder made of chlorate of potash, sulfur, and charcoal, which exploded by concussion. The cap was placed over a small tube or nipple on the side of the gun barrel. The hammer of the lock struck the cap causing an explosion which fired the gun. Opinions vary as to the actual date and inventor of the percussion cap. The Rev. A. J. Forsythe is credited with a patent for the fulminating powder in 1807. Some authorities say that the actual cap was invented in 1814 by Joshua Shaw although not actually patented until 1823. In the 1820s the percussion system began to replace the flint lock on civilian arms. They were not adopted by the military until the 1840s.

Table 24. Munitions.

ITEM	MATERIAL	SIZE	COUNT	COMMENTS
Buck Shot	Lead	No. 3	6	Buckshot for percussion or shot shell
Buck Shot	Lead	No. 00	1	For percussion or shot shell
Buck Shot	Lead	No. 0	2	No. "0" buckshot - shotgun for quail or duck hunting use
Gun Flint	Flint	L=1,3/16" W=3/4" Th=5/16"	1	Coca Cola brown color; translucent; probably for a large pistol or a rifle
Gun Flint	Flint	L=1,1/8"; W1,1/8" Th=1/4"	1	Complete; military musket size - Harper's Ferry example - used in War of Independence up until Civil War
Gun Flint Fragment	Flint	Fragment	1	Not large enough for identification
Lead Round Ball	Lead	.38 Caliber	1	Has been fired
Lead Round Ball	Lead	.45 Caliber	1	Round ball for pistol/rifle percussion
Lead Round Ball	Lead	.38 Caliber	1	Used by various percussion revolvers
Melted Lead Scrap	Lead	-	2	-
Mini Ball	Lead	-	1	Mini ball – cal. - .460 gr. Typical principal of Civil War projectiles in muzzle loaders; U.S. Springfield
Percussion Cap Fragments	Brass	-	89	Large and small for rifles and revolvers
Double Barrel Rifle Gun Barrel	Ferrous	Fragments	1	Item Cat #399 A and B; It is too thick to be a double barrel shot gun
Single Barrel Rifle Gun Barrel	Ferrous	Fragment	1	This gun has a narrower bore than 399 A and B
Total			109	

The efficient ignition provided by the percussion cap led to other improvements in firearms; two of the most significant were the revolver and breach loading rifle. In 1836 Samuel Colt obtained the first patent for his famous revolver, which relied on percussion ignition. In 1847 the .44 caliber Colt "Walker" model was issued to the Army Dragoons, which was the first military use of this weapon. This was replaced a year later by the .44 First Model Dragoon. The most popular arm for military and civilian use was the .36 "Navy" revolver first issued in 1851. During this same period, experiments in breach loading weapons had been successful and, in 1859, Sharp issued its famous breech loading rifle.

This gun was loaded from the rear of the barrel with a paper cartridge and used a percussion ignition system. The Colt revolver and Sharps rifle greatly increased the available fire power over more traditional muzzle loading guns of the mid nineteenth century. They were so effective that the San Antonio–San Diego Mail Line management recommended that each passenger "should provide himself with a Sharp's rifle, (not carbine) with accoutrements and one hundred cartridges, a navy sized Colts revolver and two pounds of balls" (*San Diego Herald* 11-21-1857).





*(a) Double Barrel Rifle Fragment, #399A (by Sam Webb, 2004).*



*(b) Burned Roof Thatch and Support Poles, #587 (by Sam Webb, 2004).*

Figure 65. Rifle and Thatch Fragments.

## BUILDING MATERIALS

Building materials made up 76 percent (1,731 items) of the collection. Items identified are listed in Table 25. A majority of the material represented highly fragmented items such as lumber, un-milled wood scraps, and roof thatching (Figure 65b) that could only be quantified by weight. The bulk of the building materials consisted of 577 grams of square nail fragments. Examination of a sample determined that the average nail weighed 3 grams. Numbers were determined by dividing the total weight by three, resulting in an estimated number of 1730 square nails. Sixty-eight percent by weight (3,561 grams) and estimated number (1,187) were recovered from the Feature B4 trash deposit. This suggests the burning of significant quantities of recycled material for fuel. The source for this large quantity of scrap wood in such an isolated environment is unclear.

Table 25. Identified Building Materials.

ITEM	TYPE	QUANTITY	WEIGHT
Window Glass	Plain	0	201
Lumber		0	41
Nail	Round	1	2
Nails	Square	1,730	5,192
Roof Thatching	-	0	4
Burned Roof Thatching		0	84
Window Screening	-	0	1
Wood Fragments		0	158
Total		1,731	5,683

## LIVERY

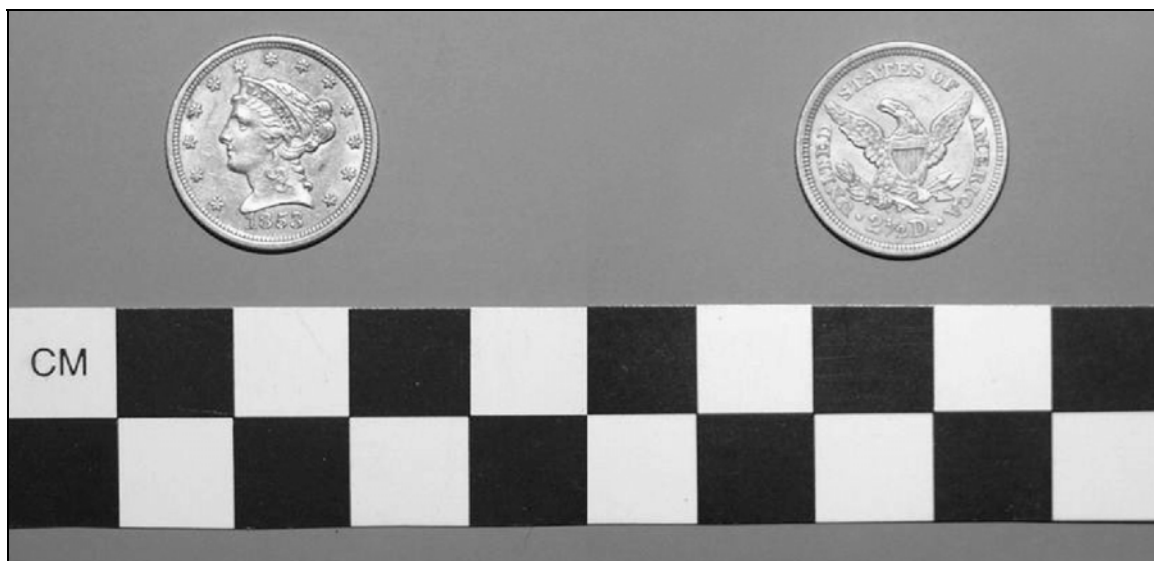
Livery items are used for the working, maintenance, and care of horses. Although historic documentation indicates that this was one of the basic activities occurring at the station, these artifacts made up only 0.44 percent of the collection. They included pieces of three horseshoes, three harness buckles, and three harness rivets (Figure 66a). The small number of livery items is undoubtedly the result of the fact that excavation encountered mostly domestic refuse pits and activity areas. With the exception of Feature B2, and the small adobe block remnants of Structure D, stable-related areas were not found. In the mid-1920s, historian Roscoe Conkling described ruins of a 50-x-60-foot corral adjoining the station building remains. This area may have been destroyed when Buster McCain graded the site and constructed the earthen dike in 1958.

## HARDWARE

Hardware made up 0.49 percent (11 items) of the collection. This group includes miscellaneous hardware that does not fit within the other defined groups. A variety of items were identified and are listed in Table 26.



(a) *Horseshoe, Harness Buckles, #448, #442, #444 (by Sam Webb, 2004).*



(b) *Quarter Eagle 1853, #239 (by Sam Webb, 2004).*

Figure 66. Horseshoe and Quarter Eagle Coin.

Table 26. Hardware.

ITEM	QUANTITY	WEIGHT
Banding/Strapping	1	2,636
Bolt	1	7
Bolts	3	145
Bracket	1	5
Cable	1	51
Clip	1	1
Ferrule for Small Paint Brush	1	1
Gasket	1	48
Handle	1	46
Hardware Cloth	1	12
Rods	2	23
T Brace	1	3
Wire	0	115
Total	15	3,093

## COINAGE

Coinage includes money, tokens, and other coins. Two were recovered and included an 1853 two and a half dollar “Quarter Eagle” gold piece (see Figure 66b), and a hammered silver coin that was too mutilated to identify.

## SPECIAL OCCUPATION

The special occupation activity group includes artifacts related to a specific profession or job. The Carrizo Stage Station produced military items, mining items, and grain used in animal husbandry.

### Military

Three military items made up 0.13 percent of the collection. They include a brass reinforcement end to the ribbon of a military uniform and pieces of two different brass epaulets (Figure 67a) of the type common on dragoon uniforms in the 1850s and 1860s (Steffen 1978:43).

### Mining

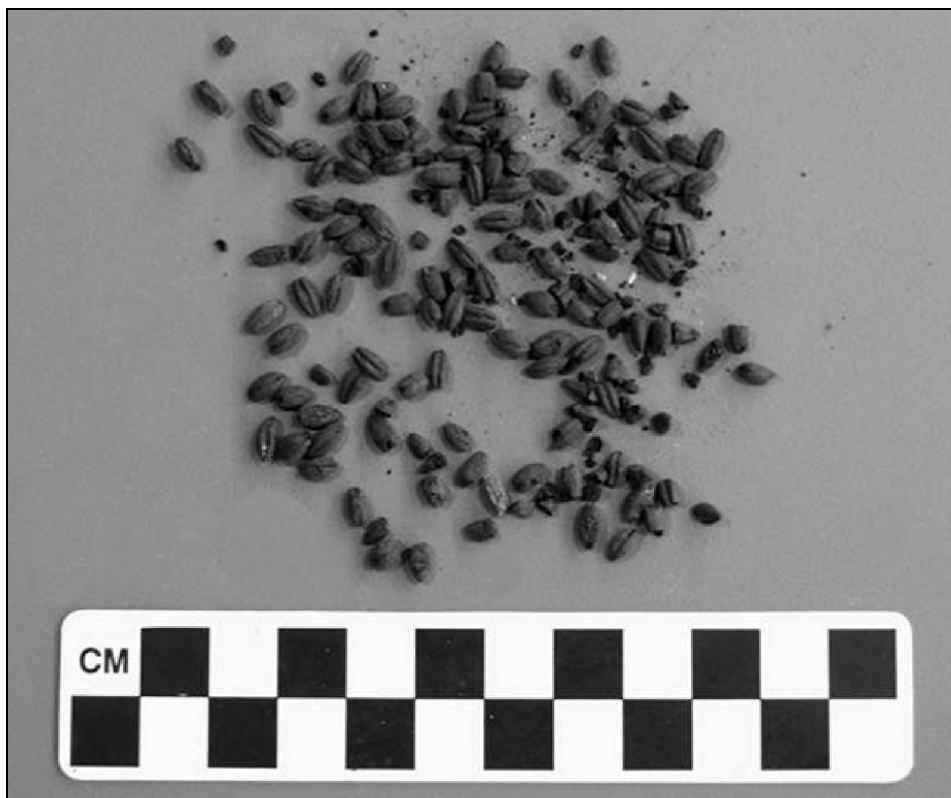
A fragment of an assay crucible made up 0.04 percent of the collection.

### Animal Husbandry

One hundred forty-four grains of barley were recovered from the Feature B2 ash lens (Figure 67b).



(a) Brass Epaulets, #762C and #762B (by Sam Webb, 2004).



(b) Charred Barley Seeds, #792 (by Sam Webb, 2004).

Figure 67. Epaulets and Charred Barley Seeds.

## UNIDENTIFIED

Unidentified items constituted two percent (26 items) of the artifacts recovered. They are listed and described in Table 27.

Table 27. Unidentified Items.

MATERIAL AND ITEM	SIZE	COUNT	WEIGHT	COMMENTS
<b><i>Bone</i></b>				
Bone Covering For Handle	Fragment	1	1	-
<b><i>Brass</i></b>				
Brass Rivet, Strip and Aglet	Fragment	1	11	May be parts of more than one item
Brass Rivets/Knobs and Plate	Plate L=2 1/2" W=1 1/4"	1	24	Plate is an elongated diamond shape, and slightly curved
Unidentified Brass Item	L=1/2" D=3/16"	1	1	-
<b><i>Lead</i></b>				
Sheet Lead	L=5" W=@4"	1	62	Indented oval shape is the right size for inside a buckle
<b><i>Ferrous</i></b>				
Unidentified Ferrous Item	D=1"	1	7	Item is round and flattened; broken in half
Unidentified Ferrous Item	Fragment; W=1 5/8" Th=5/8"	1	331	Seems to be a long heavy bar w 1 side flat, the other possibly curved.
Unidentified Ferrous Item	Fragment; Th=5/8"	1	41	Fragment of item
Unidentified Ferrous Item	D=1"	1	6	Looks like a link to a chain pulled apart where the ends join
Unidentified Ferrous Item	L=2 3/4" W=1 9/16" Th=3/8"	1	39	Item is flat; shaped obtuse triangle w opposite ends squared off (has 5 flat edges)
Unidentified Ferrous Item	Fragment	1	64	-
Unidentified Ferrous Item	Fragment	1	663	Made of sheet iron, fragmented, possibly a container
Unidentified Ferrous Item	L=2 5/8" W=2" Th=1/2"	1	58	Shape is acute angle triangle; flat
Unidentified Ferrous Item	Fragment; Circular Or Oval	1	124	Looks like a flat lid with a turned down edge 2 1/2"
Unidentified Ferrous Item	Fragment	1	13	Bar fragment w broken off extensions
Unidentified Ferrous Item	L=4 5/8" W=2 1/4" Th=9/16"	1	110	Item is roughly right triangle in shape but long edge is curved. Item is flat but bent into a slight curve. Apex corner broken off.

Table 27. Unidentified Items *continued*.

MATERIAL AND ITEM	SIZE	COUNT	WEIGHT	COMMENTS
<b><i>Ferrous continued</i></b>				
Unidentified Ferrous Item	Fragment	1	28	Item has at least 1 blade and pivot point; it may be a pair of scissors
Unidentified Ferrous Item	Fragment	1	284	Highly fragmented large iron pieces
Unidentified Ferrous Item	L=26 1/4" D=5/16"	1	48	Made of bar iron bent at right angle in middle, w small, forged, flattened "feet" at ends to insert into other item. May be a handle
Unidentified Ferrous Item	D=3 1/2"	1	84	Highly fragmented large iron ring
Unidentified Ferrous Item	Fragment; W=1 1/4"	1	24	Ferrous bar/strap w a forged pin pivot point
Unidentified Ferrous Item	Fragment	1	221	Large chunks, fragmented, shaped w legs, bar, and enclosed area
Unidentified Ferrous Item	D=8"	1	188	Possibly a lid to a container; has reinforced edge
<b><i>Unidentified Material</i></b>				
Unidentified Item	Fragment	1	2	-
<b><i>Lead</i></b>				
Unidentified Lead Item	Fragment	1	1	Looks like a curled lead shaving
Total		25	2,435	





# *Chapter 8:*

## *Data Synthesis and Interpretations*

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### **INTRODUCTION**

This section will synthesize historical and archaeological data to examine site function and evolution, the architectural methods and traditions represented by the building remains, and the ethnic, social, and economic influences affecting the occupants of the Carrizo Creek Stage Station.

### **SITE FUNCTION AND EVOLUTION**

Stratigraphic, architectural, and functional artifact analysis have provided data to determine the sequence of construction phases represented by the archaeological features at the Carrizo Creek Stage Station site. The earliest building was Structure A, constructed in June 1855, by the Army and used in September 1857, by I. C. Woods as a major change station for the San Antonio and San Diego Mail. It is assumed that all subsequent changes occurred between this time and when the Butterfield Overland Mail ceased to operate in 1861. Although occupation of the building is documented through at least the mid-1870s, the few existing descriptions consider it to be in a run-down and neglected state. It seems most likely that the investments in infrastructure provided by the Butterfield company account for subsequent construction at the station.

Shortly after overland mail service began, Feature B4 was used as a trash dump. It was then covered over and a feed bin was constructed at Feature B2 and probably an adobe corral at Structure D. At some point the feed bin burned. Following this, a wattle and daub kitchen structure was built on the north side of the adobe station at Structure C. This functioned as an outdoor kitchen. Finally, this was replaced with an adobe building, Structure B, that also served as a kitchen. A wooden feature was built on the north side of this adobe, which later burned at the location of Feature B1.

### **ARCHITECTURAL ASSESSMENT**

The Carrizo Stage Station combined elements of traditional architecture commonly found in Northern Mexico and specifically in the desert regions of Sonora and Baja California. This method of building derived from a combination of Spanish Colonial and Native American styles that evolved as Hispanics adapted to the desert. It was the architecture of a

people who, for generations, had lived as desert dwellers (Garrison 1990; Sheridan 1986:12). The Carrizo Stage Station reflects vernacular Sonoran architectural traditions in almost all of its construction aspects.

### **Adobe Dwellings**

Traditional Sonoran adobe structures maximized the use of earth throughout the building. Adobe walls 18 to 24 inches thick were built in shallow trenches on the bare earth or on small cobble foundations. These had small door openings framed with wooden lintels and floors of packed earth or stone or adobe pavers. Some had no windows; those that did were small and often unglazed. Flat roofs were covered over with a thatch of branches supported by mesquite poles. This was often topped with packed earth or mud. However, in some cases, especially over kitchen areas, the thatch was not covered. Walls were plastered inside and out with mud and sometimes white washed with lime. In extremely arid regions they were sometimes left unplastered (Garrison 1990; Gleye et. al. 1981:127-35; Delgado and Wade 1978).

### **Jacal Dwellings**

*Jacal* structures (*jacales*) are traditionally thatched-roofed buildings made of wattle (branches and twigs) overlaid with a daub (clay or mud) plaster. In northern Mexico, *jacales* were built in a variety of ways. In one method, the outline of the building was formed with 6-to-8 inch diameter mesquite or cottonwood posts placed in the ground approximately six to eight feet apart. These principal posts had a Y-shaped notch at the top, which carried horizontally-placed poles that supported the roof. Smaller 3-to-5-inch diameter support posts were placed approximately two to three feet apart between the principal posts. Willow branches, horizontally split saguaro ribs, reeds, or ocotillo branches were interlaced or woven between the secondary posts to form latticed walls.

The roof supports were covered with mesquite poles that were in turn covered with smaller sticks or cane two to three inches in diameter and capped with a layer of grass or straw and a layer of mud. Doorway and window sills occasionally had milled lumber frames, but many times did not. Cloth or woven cane mats often served for door and window coverings (Fay 1955, 1969; Lopez Morales 1987:223-224).

Another method of *jacal* construction varied in its wall framing. Instead of using interwoven wall material, horizontally placed poles one to two inches in diameter were attached at two-foot intervals to the inside and outside of the support posts. Ocotillo or willow stakes were then placed vertically between the poles with their ends embedded into the ground (Lopez Morales 1987; Fay 1958). *Jacal* structures included not only those that were plastered with mud to form substantial dwellings, but also many that were left undaubed (as wattle only), which were used as exterior kitchens and outbuildings for adobe and rock walled houses.

### **Carrizo Stage Station Buildings**

The Carrizo Stage Station construction conforms to traditional methods used in Northern Mexico during the eighteenth and nineteenth centuries. The buildings were made of local materials found on site. Essentially Structures A and B were small, thatched roof adobe buildings with packed earthen floors. The 24-inch-wide adobe walls were supported by shallow cobblestone foundations. The thatch roof consisted of a framework of poles

“thrown” across the tops of the walls and covered with a layer of sticks and grass. This is confirmed in descriptions as well as by the roof fall remains found in the east room of Structure A. Although the exact configuration of the wattle and daub building represented by Structure C cannot be determined, its building methods, with a tight row of willow or ocotillo stakes placed in a narrow trench, very closely resembles the second described method of *jacal* construction.

## **ARTIFACT DATA SYNTHESIS**

Artifactual data synthesis will consist of summarizing and interpreting analytical attributes of the artifact assemblage that give indications of the ethnic and economic influences manifested by the population it represents. Much of the interpretation is based on cross-site comparison of quantified artifact patterns developed from the Carrizo Stage Station collection with the same types of information developed from other household sites dating circa 1860 through 1880. The synthesis consists of functional artifact patterning analysis, bottled product consumption pattern analysis, dietary analysis, and economic analysis.

### **Activity Profiles**

Activities represented at the site by the artifact assemblage were determined by development of activity profiles. As explained in the methodology sections, artifacts were divided into functional categories or groups. Artifacts in each group were then quantified by the estimated minimum number of individual items represented and the amount converted into a percent of the total weight or number of artifacts for each deposit. The resulting percentages for each activity group defines relationships between activities that occurred on the site and allows the detection of broad patterned regularities related to site function.

The activity profile for the Carrizo Creek Stage Station is presented in Table 28. It is dominated by building materials, consisting largely of square nails, at 76 percent. In Table 29 and Figure 68 the profile is shown after building materials have been deleted so that the values of other artifact classes can be more easily interpreted. It is now dominated by animal husbandry and munitions at 27 and 20 percent, followed by garment at 15 percent and kitchen and consumer items at 11 and eight percent respectively. The domination of the assemblage by animal husbandry results from the large number of barley seeds recovered from Feature B2. It reflects the historically documented role of Carrizo as a swing station to change and care for mule and horse teams used by the San Antonio and San Diego and Butterfield stages. In Figure 69 animal husbandry has been taken out and the values recalculated. Munitions now dominate the assemblage, reflecting the need for personal defense as well as hunting at this isolated outpost in a wild and uninhabited frontier. The following passages from the San Antonio and San Diego Mail journal of Phocion R. Way bear repeating here:

There are a good many border men living here and they are decidedly a hard looking set. They are generally fine specimens of the physical man but the life they lead is of constant danger and makes them bold and reckless. They seem to place no value on human life, and apparently think no more of shooting a man that offends them than they would of shooting a horse or dog.... Every man, no matter what his business goes well armed at all times. [Way 1858:44]

Everybody goes armed here. If a man has no shirt to his back he will have his knife in his belt. [Way 1858:159]

Clearly a culture that emphasized the use of firearms, as observed by Phocion Way on the eastern portions of the Overland Mail route, was also the convention at the Carrizo Stage Station.

Table 28. Site Activity Profile.

Activity	Quantity	Percent
Consumer	41	1.81
Livery	10	0.44
Munitions	109	4.81
Personal	39	1.72
Military	3	0.13
Mining	1	0.04
Kitchen	61	2.69
Building	1,731	76.39
Coins	2	0.09
Garment	81	3.57
Hardware	11	0.49
Household	5	0.22
Unidentified	26	1.24
Animal Husbandry	144	6.35
Total	2,264	100.00

Table 29. Site Activity Profile without Building Materials.

Activity	Quantity	Percent
Consumer	41	7.69
Livery	10	1.88
Munitions	109	20.45
Personal	39	7.32
Military	3	0.56
Mining	1	0.19
Kitchen	61	11.44
Coins	2	0.38
Garment	81	15.20
Hardware	11	2.06
Household	5	0.94
Unidentified	26	4.88
Animal Husbandry	144	27.02
Total	533	100.00

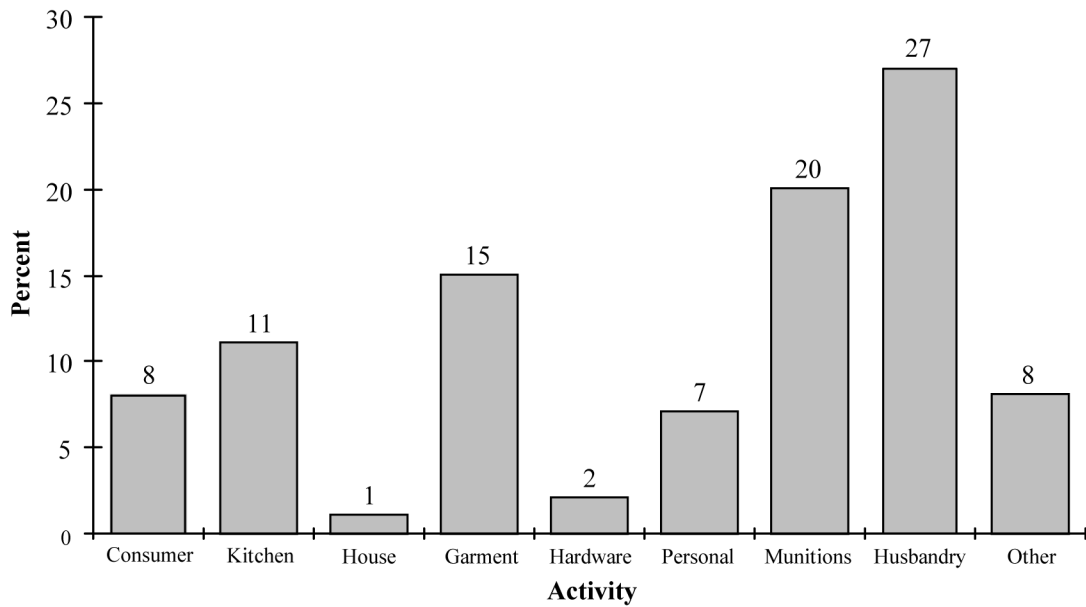


Figure 68. Site Activity Profile.

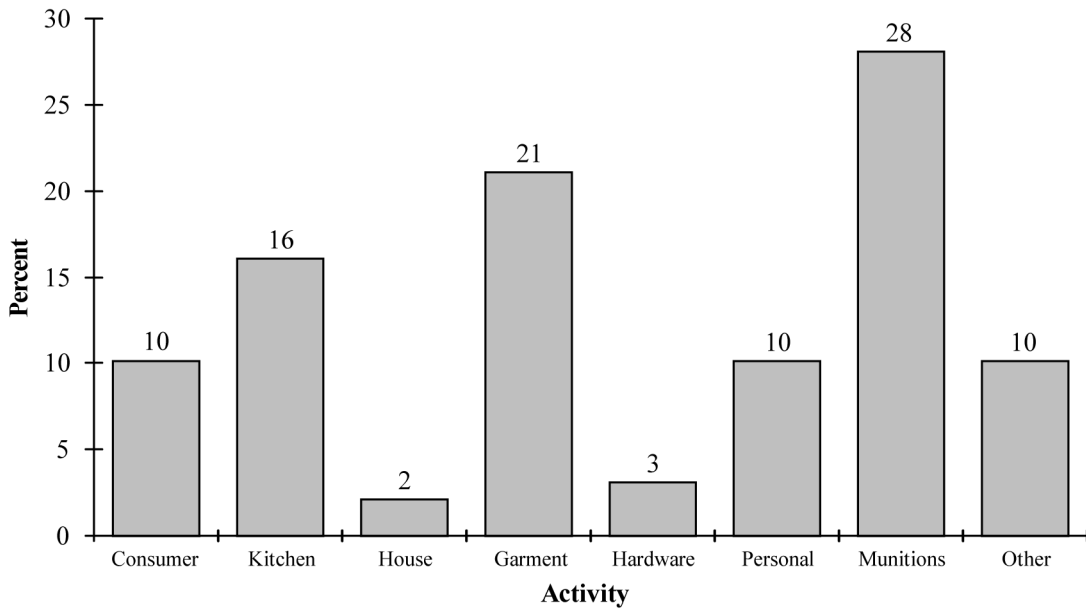


Figure 69. Site Activity Profile without Animal Husbandry.

**Cross-Site Artifact Profiles**

The activity profile of the Carrizo Stage Station was compared to profiles of assemblages representing households dating circa 1860 through the 1880s. Few examples exist of Southern California assemblages that date from the 1860s. The only reports that could be located are the Diaz Adobe privy in Monterey (Felton and Schulz 1983) and the Aguirre Adobe in Old Town San Diego (Phillips et al. 2001). An 1880s assemblage from the Pio Pico Adobe in Whittier, California, was also used (Van Wormer 1983b). Artifactual

material from these excavations was also quantified according to the methods previously described.

The activity profiles of these sites are compared to the Carrizo collection in Figure 70 and Figure 71. The stage station assemblage stands out from the other sites in several aspects. It is the lowest in consumer and kitchen items, which are both near 10 percent. The collection, on the other hand, is the highest in animal husbandry and munitions at 27 and 20 percent. Munitions values for the other sites are ten percent or less and animal husbandry is not represented. This analysis shows the unique environment of the Stage Station. As already stated, its primary function (to care for horses and mules) is reflected in the dominance of the assemblage by animal husbandry. Other aspects of the Carrizo pattern reflect its isolated environment.

All of the other sites are on the coast and the Pio Pico assemblage dates to the period after the transcontinental railroad had been completed. Supplies were much more readily available for these households, resulting in higher consumer and kitchen item values. In contrast, Carrizo had to be supplied overland. Its isolated location on an unsettled and dangerous frontier required an increased emphasis on weapons for personal protection as well as hunting. The situation of difficult supply lines and an increased need for fire arms is reflected in the decreased percentages of consumer and kitchen items and the high value for munitions.

### **Consumer Analysis**

Relative frequencies of beverage bottles from the Carrizo Stage Station assemblage were compared to the other assemblages in Figure 72. Although soft drinks are included, more than 95 percent of the beverage containers from all the sites were liquor bottles. At 38 percent, the Carrizo assemblage beverage bottle value is lower than that of the Aguirre household at 60 percent, but comparable to the Diaz and Pio Pico collections at 40 percent. As previously discussed, the liquor bottles included ale or porter, wine and gin containers. These products would have come overland from either San Diego or Los Angeles.

### **Dietary Analysis**

A cross-site comparison of culinary bottles is shown in Figure 73. The Carrizo assemblage is compared to collections representing Latin American and southern European as well as Anglo-American populations. In addition to the Diaz, Pio Pico and Aguirre collections, comparisons were also made to some other late-nineteenth and early-twentieth century sites representing specific ethnic groups. These assemblages include refuse from the foundation units of the Encino Roadhouse, the Encino Roadhouse Features 1 and 3, and household refuse deposits from Santa Ana, California. The Encino foundation units and Santa Ana represent Anglo American culinary traditions (Van Wormer 1983a; Elliott 1985). The other sites represent southern European and Hispanic populations. The roadhouse features are from a Basque population, while the Pio Pico and Diaz adobes were occupied by Mexican Californio families (Van Wormer 1983a, 1983b; Felton and Schulz 1983).

The Hispanic–Southern European assemblages are high in percentages of pepper sauce, spice, and olive oil and exhibit a distinct lack of other culinary products (Van Wormer 1983a, 1983b).

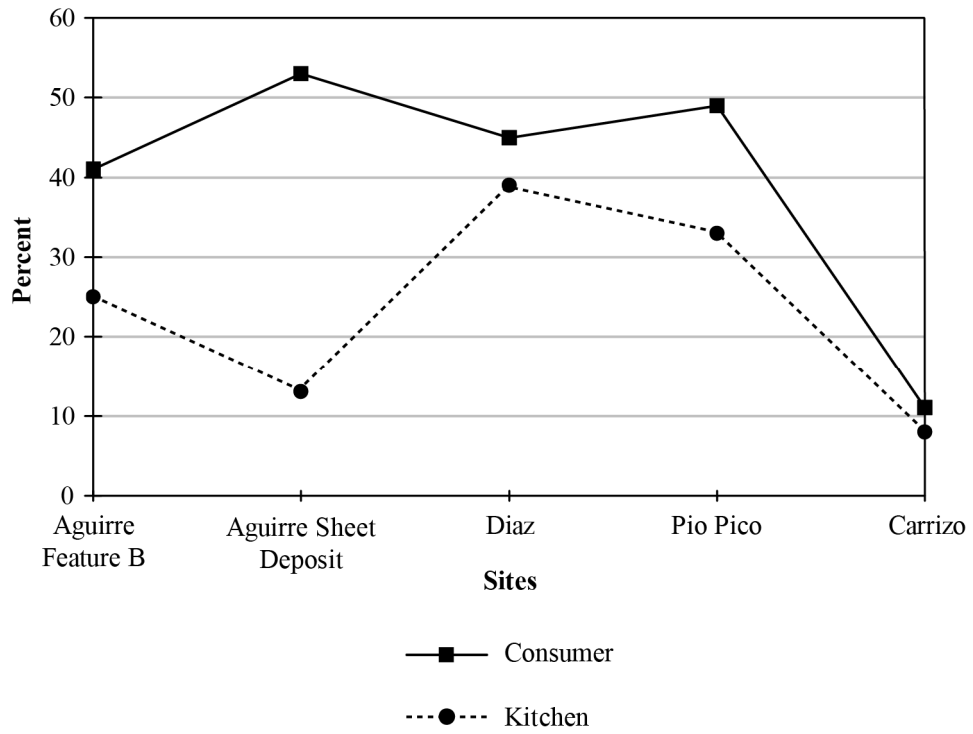


Figure 70. Cross-Site Activity Profiles (Consumer and Kitchen).

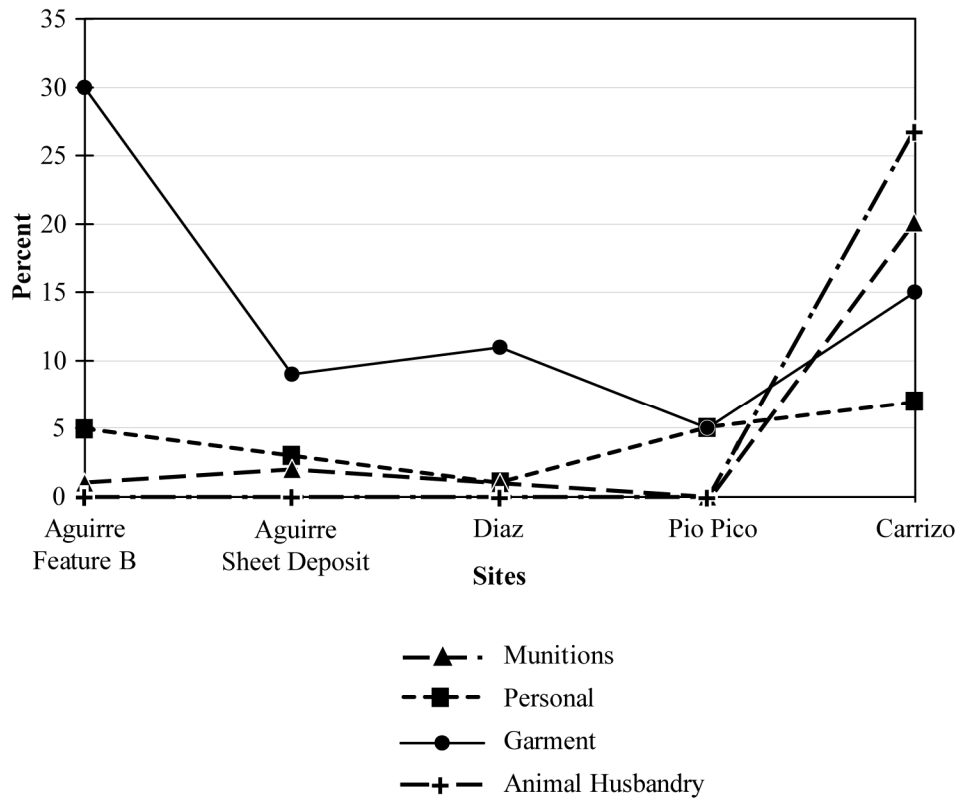


Figure 71. Cross-Site Activity Profiles (Munitions, Garment, Personal, and Husbandry).

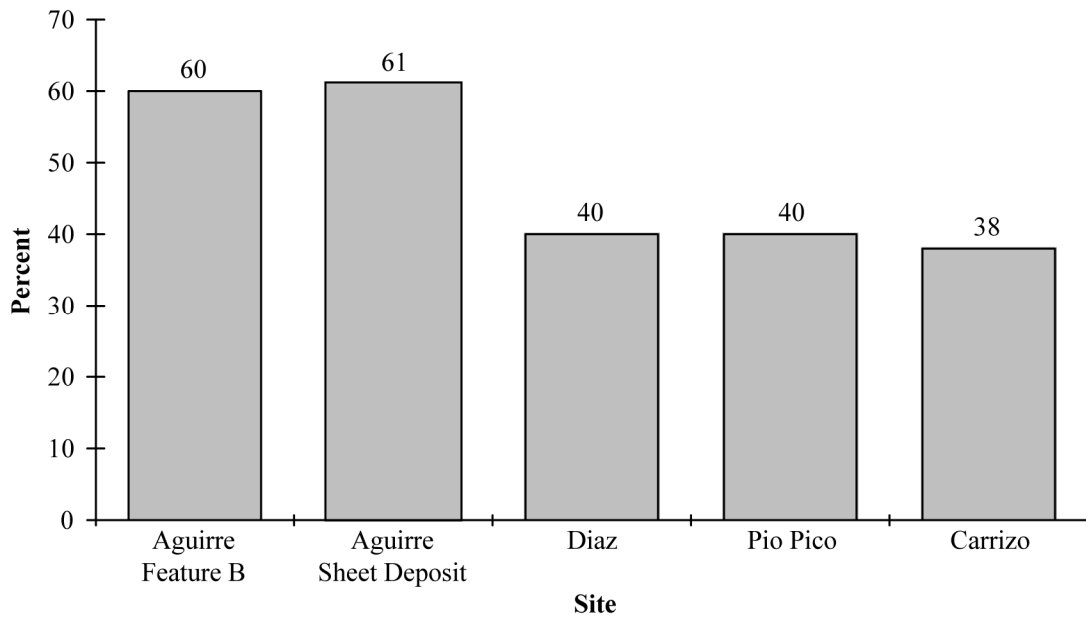


Figure 72. Cross-Site Activity Profile (Beverage Bottles).

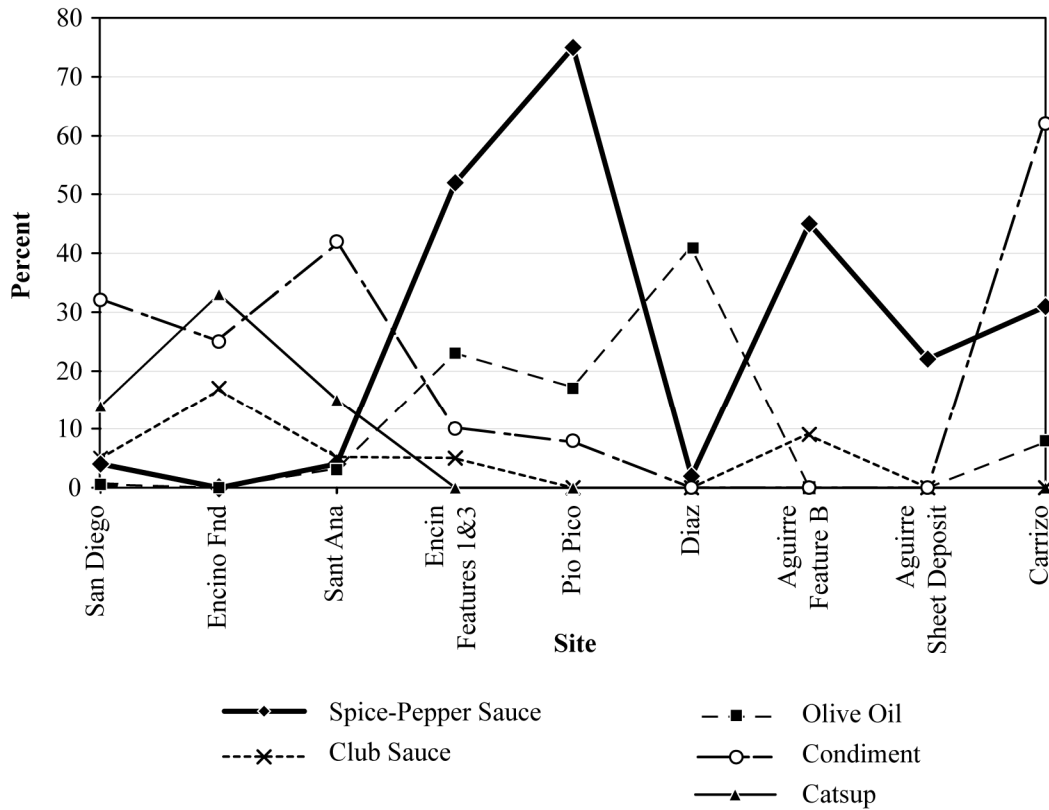


Figure 73. Cross-Site Activity Profiles (Culinary Bottles).



The San Diego, Santa Ana, and Encino foundation unit assemblages resemble each other in the wide variety of products and their dominance by packer lip, club sauce, and catsup bottles. These products make up ten percent or less of the southern European-Hispanic sites. These sites contain far fewer products and are dominated by spice, pepper sauce and olive oil, which constitute four percent or less of the Anglo-American culinary bottle assemblages. The Carrizo Stage Station shows a blending of both traditions. The assemblage exhibits Hispanic dietary influences with relatively high percentages of spice-pepper sauce and olive oil bottles that together make up 38 percent of the culinary containers. A traditional Anglo-American style diet, however, is also strongly indicated by the fact that the collection is also the highest in packer-closure-style condiment and pickle bottles at 62 percent of the culinary bottle assemblage.

Faunal, Native American pottery and ground stone data also document this blending of two dietary traditions. According to Arter's analysis, the butchering tools and meat cuts represented among the butchered domestic fauna reflect two different processing methods. Sawn steak, roast, and rib cuts reflect Euro-American butchering techniques, whereas cleaved ribs and shattered limb bones are typical of Mexican culinary practices. Significant quantities of Native American pottery cooking vessels are another element of the assemblage that suggest traditional Mexican and/or Native American cooking. In nineteenth-century Mexican society, much of the food was prepared in locally-made paddle-and-anvil manufactured wares. This is still the case in some of the remote regions and Native American communities of Baja California. High quantities of Native American pottery have been associated with artifact assemblages from late nineteenth- and early twentieth-century Southern California mining camps that had been occupied by Mexican families, and represent Hispanic dietary patterns (Burney et al. 1993; Schaefer 1993). The use of traditional stone grinding implements and open hearth cooking methods also reflects the incorporation of Mexican and/or Native American traditional processing and cooking styles at the site.

In addition to the blending of two dietary traditions, the types of meat consumed at the stage station are interesting and insightful. The large quantity of cattle and sheep remains indicates a reliance on livestock driven overland and butchered on site. In spite of this, wild animals also made up an important component of the station occupants' diet. Rabbits and hares appear to have been procured at the station. However, a large number of water fowl were shot elsewhere and brought in, possibly already dressed and salted, given the lack of water fowl skulls in the collection.

The small amount of historic documentation of food available along the overland mail route confirms the blending of Mexican, Euro-American, and Native American cooking found in the Carrizo Creek Stage Station archaeological assemblage. References are often made to beef steak and mutton. All meals appeared to have included beans (Mexican *frijoles*) and coffee as consistent staples. (Way 1858:53, 155). In 1857, Charles F. Running described a typical Mexican supper of "jerked beef, tea, and *algunas tortillas mal hechas*," (some poorly made tortillas) served by an Native American woman. Passengers on the Butterfield Stage recorded eating beef, dried apples, beans, potatoes, and frequently pies and venison. At Alamo Mocho Station, travelers breakfasted on "tough steaks in another dusty adobe." The Butterfield passages appear to describe a more Anglo-American diet with a partial reliance on wild game.

## Economic Analysis

Economic analysis was conducted by cross-site comparison of ceramic economic index values or price scaling. As previously explained, ceramic price scaling is based on an index developed from cost relationships of decorated tableware during specific time periods (Miller 1980). This analysis used the indexes developed by Miller (1980) for the mid-nineteenth century and Henry for ceramic tableware manufactured during the late-nineteenth and early-twentieth centuries (Henry 1982). Results are shown in Table 30 and Figure 74. At 1.88, the Stage Station index value is comparable to middle class households. It is higher than 1.82 for the privy at the well-to-do merchant's house of the Aguirre Adobe in San Diego, but considerably lower than the values of 2.28 for the sheet deposit from the same location, and 2.69 for the wealthy Diaz household in Monterey (Phillips et al. 2001; Felton and Schulz 1983). Despite the isolation of the Stage Station, ceramic tableware was not plain or stark, but comparable to middle income level households on the California coast.

Table 30. Ceramic Index Value Calculations.

ITEM AND TYPE	INDEX VALUE	QUANTITY	PRODUCT
Plate			
Hand Painted Floral Polychrome	2.36	1	2.36
Undecorated	1.00	1	1.00
Molded Ironstone	1.80	4	7.20
Transfer	2.63	1	2.63
Soup Plate			
Undecorated	1.00	2	2.00
Cups and Saucers			
Undecorated	1.77	4	7.08
Hand Painted Floral Polychrome	1.23	9	11.07
Porcelain	5.83	2	11.66
Total		24	45.00

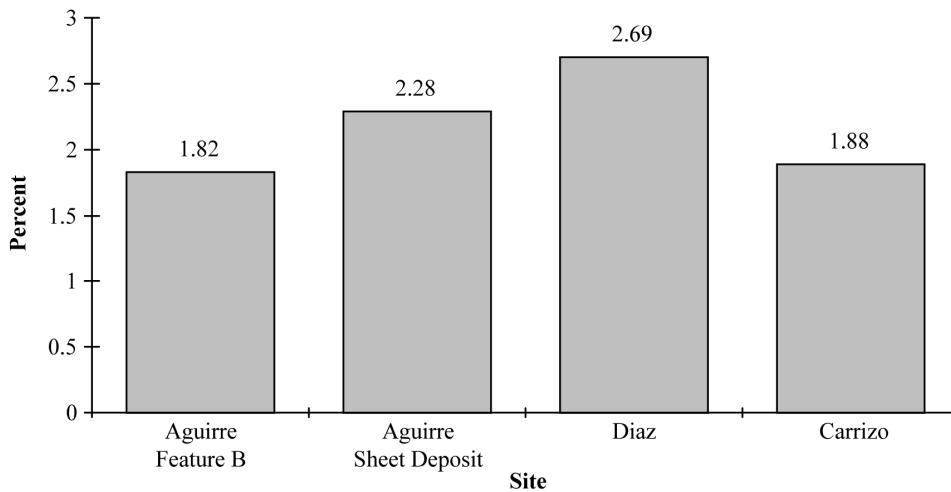


Figure 74. Cross-Site Activity Profile (Ceramics).

## *Chapter 9: Conclusions*

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Carrizo Creek, a small stream that has always been so shallow and narrow that it can easily be stepped across, is one of the most historically significant locations in the Colorado Desert. As the first reliable watering spot encountered after crossing 90 miles of arid wilderness west of the Colorado River, it was well known and the goal of many travelers on the Southern Emigrant Trail for decades prior to the establishment of the Overland Mail stage station on its banks in 1857. Accounts of travel over the portion of the trail between the Colorado River and Carrizo Creek have been considered as some of the most distressing records of overland Gold Rush travel (Wray 2000). After reaching the spring, the overland travelers' situation gradually improved. From Carrizo, at about 500 feet above mean sea level, a series of elevated valleys known as the Carrizo Corridor and Warner's Pass provided reliable water and gradually lifted the emigrants out of the desert until the top of the mountains and well-watered pasture land was reached at Warner's Ranch 55 miles to the northwest at about 2,800 feet above sea level. Here the arduous desert crossing was over.

The Southern Emigrant Trail's origins preceded the "Gold Rush." Late eighteenth and early nineteenth century Spanish and Mexican military explorations first established the route. It became well used by traders and trappers traveling between California and Sonora in the 1830s. The 1840s and 50s saw invading American armies travel the route to California during the Mexican War and its aftermath, followed by thousands of Gold Rush Argonauts. In 1855, the Army established a depot at Carrizo Creek. Within just a few years this building would become a station for the Overland Mail.

From 1857 to 1861 the Gila trail through Arizona was used by the overland mail service. Initially carried by the San Antonio and San Diego Mail line from July 1857 through August 1858, then the Butterfield Overland Mail Company from September 1858 through June 1861, establishment of the overland mail constituted the first communication and transportation link across the continental United States, 12 years before completion of the transcontinental railroad.

The station at Carrizo Creek became an important link in the San Antonio—San Diego Mail line and functioned as one of seven major stations west of the Rio Grande. Here passengers disembarked to change coaches. At Carrizo Creek they left the westbound stage from San Diego and boarded another that ran between Carrizo and Fort Yuma. It is assumed that this stage remained at the station until the other returned with eastbound passengers

that had boarded in Yuma. Watering stations were established at an average of 30-mile intervals. The only actual company station in the Colorado Desert appears to have been the one at Carrizo Creek. Watering holes located at Indian Wells, Alamo Mocho, and Cooke's Wells were unmanned.

From 1858 to 1861 Carrizo Creek also served as a station for Butterfield's Overland Mail line. This company developed a much larger and more complex infrastructure than the San Antonio and San Diego Mail, and had manned stations every ten to 15 miles, and occasionally 20 to 25 miles, apart. Under the Butterfield Mail, Carrizo Creek functioned as a changing or "swing" station to replace worn out teams with fresh horses.

Archaeological excavations at the site of the Carrizo Stage Station encountered remains of three structures, a trash pit, and other related features. Stratigraphic, architectural, and functional artifact analysis have provided data to determine the sequence of construction phases represented by archaeological features. The earliest building was Structure A, a two-room building, constructed in June 1855 by the Army and first used as a stage stop in September 1857 for the San Antonio and San Diego Mail. It is assumed that all major subsequent changes occurred between this time and when the Butterfield Overland Mail ceased to operate in 1861. Although occupation of the building is documented through at least the mid-1870s, the few existing descriptions consider it to be in a rundown and neglected state.

Shortly after overland mail service began, Feature B4 was used as a trash dump. It was then covered over and a feed bin was constructed at Feature B2 and probably an adobe corral at Structure D. At some point the feed bin burned. Following this, a wattle and daub kitchen structure was built on the north side of the adobe station building. The remains of this building were designated as Structure C. Finally, this was replaced with an adobe building, Structure B, which also appears to have served as a kitchen. A wooden feature was built on the north side of this adobe, which later burned at the location of Feature B1.

For Structure A, activity profiles for the east and west rooms were compared. The east room produced 81 percent of the artifacts (52 items). All the munitions, personal items, household items, a coin, and most of the garment items were recovered from the east room. The munitions included buckshot, a lead ball, and percussion caps. Shoe eyelets, suspender hardware, and buttons made up the garment items. Personal items included a lace-making bobbin, a desert rose quartz mineral specimen, and a red clay smoking pipe.

The west room assemblage, on the other hand, was dominated by consumer and kitchen items that included liquor and culinary bottles, egg shell fragments, and pieces of undecorated ceramic earthenware. This would suggest that the east room may have been a sleeping room where garments, personal belongings, and weapons were stored, while the west room may have served as a kitchen and dining room, where meals and beverages were prepared and consumed. The differences in these activities explain the higher number of artifacts in the east room where a wider variety of activities and associated items would have resulted in greater loss.

Construction at Carrizo Stage Station combined elements of traditional architecture commonly found in Northern Mexico and specifically in the desert regions of Sonora and Baja California. This method of building derived from a combination of Spanish Colonial and Native American styles that evolved as Hispanics adapted to the desert. It was the architecture of a people who, for generations, had lived in the desert as desert dwellers

(Garrison 1990; Sheridan 1986:12). The Carrizo Stage Station reflects vernacular Sonoran architectural traditions in almost all of its construction aspects. It was built of local materials found on site. Essentially, Structures A and B were small, thatched-roof adobe buildings with packed earthen floors. The 24-inch-wide adobe walls were supported by shallow cobblestone foundations. The thatch roof consisted of a framework of poles “thrown” across the walls and covered with a layer of sticks and grass. This is confirmed in descriptions as well as by the roof fall remains found in the east room of Structure A. Although the exact configuration of the wattle and daub building represented by Structure C cannot be determined, its construction methods, with a tight row of willow or ocotillo stakes placed in a narrow trench, is typical of *jacal* construction common to northern Mexico.

The artifact assemblage activity profile of the Carrizo Station collection was compared to profiles of assemblages representing households dating circa 1860 to through the 1880s. The stage station assemblage stands out from the other sites in several aspects. It is the lowest in consumer and kitchen items, which are both near ten percent. The collection, on the other hand, is the highest in animal husbandry and munitions at 27 and 20 percent. Munitions values for the other sites are ten percent or less and animal husbandry is not represented. This analysis shows the unique function and environment of the Stage Station. Its primary function to care for horses and mules is reflected in the dominance of the assemblage by animal husbandry. Other aspects of the Carrizo pattern reflect its isolated environment. All of the other sites are on the coast and the Pio Pico assemblage dates to the period after the transcontinental railroad had been completed. Supplies were much more readily available for these households resulting in higher consumer and kitchen item values. Carrizo had to be supplied overland. Its isolated location in an unsettled and dangerous frontier required an increased emphasis on weapons for personal protection as well as hunting. The situation of difficult supply lines and an increased need for firearms is reflected in the decreased percentages of consumer and kitchen items and the high value for munitions.

In spite of the difficulty of obtaining supplies, life at the station was by no means lacking amenities. The ceramic index value is not exceptionally low and is comparable to middle class households. It is higher than the value for the privy at the Aguirre Adobe in Old Town San Diego, but considerably lower than the value for the wealthy Diaz household in Monterey. A variety of liquors were also available at the station, including ale or porter, wine, and gin.

Dietary analysis of Carrizo Stage Station bottles shows a blending of Anglo-American and Hispanic dietary traditions. The assemblage shows relatively high percentages of spice-pepper sauce and olive oil bottles, which together make up 38 percent of the culinary containers. It is also the highest in packer closure style condiment and pickle bottles, at 62 percent of the culinary bottle assemblage.

Faunal information and Native American pottery and ground stone data also document a blending of dietary traditions. The butchering tools and meat cuts represented among the butchered domestic fauna reflect two different processing methods. Sawn steak, roast, and rib cuts reflect Euro - American butchering techniques, whereas cleaved ribs and shattered limb bones are typical of Mexican culinary practices. Significant quantities of Native American pottery cooking vessels and ground stone implements are another element of the assemblage that suggest traditional Native American and/or Mexican cooking

practices. In nineteenth-century Mexican society, much of the cooking was done in locally-made paddle-and-anvil manufactured wares. This is still the case in some of the remote regions of Baja California. High quantities of Native American pottery has been associated with other assemblages that represent Hispanic dietary patterns in nineteenth-century Southern California.

In addition to the blending of two dietary traditions, the types of meat consumed at the stage station are interesting and insightful. The large quantity of cattle and sheep remains indicates a reliance on sheep and cattle driven overland and butchered on site. In spite of this, wild animals also made up an important component of the station occupants' diet. Rabbits and hares appear to have been procured at the station. However, a large number of water fowl were shot elsewhere and brought in, possibly already dressed and salted given the lack of water fowl skulls in the collection.

The small amount of historic documentation of food available along the overland mail route confirms the blending of Mexican, Euro-American, and Native American cooking documented by the Carrizo Creek Stage Station archaeological assemblage. References are often made to beef steak and mutton. All meals appeared to have included beans (Mexican *frijoles*) and coffee as consistent staples. In 1857 Charles of Running described a typical Mexican supper of "jerked beef, tea, and *algunas tortillas mal hechas*," served by an Native American woman. Passengers on the Butterfield Stage recorded eating beef, dried apples, beans, potatoes, and frequently pies and venison. At Alamo Mocho Station travelers breakfasted on "tough steaks in another dusty adobe." These passages appear to describe a more Anglo-American diet with supplemented by wild game.

In conclusion, historical and archaeological evidence present a picture of the Carrizo Stage Station as an isolated frontier outpost. The small adobe and *jacal* buildings were constructed of materials found on or near the site. Based on vernacular architectural designs common to northern Mexico, they were well-suited to life on the desert frontier but appeared as rude "backwoods" dwellings to travelers from the eastern United States. The station's isolated location in an unsettled and dangerous frontier required an increased emphasis on weapons for personal protection as well as hunting. The situation of difficult supply lines and an increased need for fire arms is reflected in the decreased percentages of consumer and kitchen items and the high value for munitions when compared to artifact assemblages representing households on the California coast. Also reflective of its situation was evidence of the blending of multiple culinary traditions. The American Southwest at this time had recently been annexed from Mexico and remained largely unsettled. It was a land where Hispanic, Native American, and Anglo-American cultures were mixing and blending. Evidence of the combining of the dietary traditions of these cultures was seen in the faunal analysis, bottle glass assemblage, and Native American ceramics at the Carrizo Stage Station.

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