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HISTORIC RESOURCE STUDY
ORGAN PIPE CACTUS NATIONAL MONUMENT
ARIZONA

by

Jerome A. Greene

DENVER SERVICE CENTER
HISTORIC PRESERVATION DIVISION
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR
DENVER, COLORADO

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Jerome A. Greene
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PART I: HISTORY OF THE LAND AREA OF ORGAN PIPE CACTUS NATIONAL MONUMENT



INTRODUCTION: THE SETTING

Organ Pipe Cactus National Monument is located along the Mexican border in southwestern Arizona. Established by Presidential Proclamation in 1937, the monument encompasses some 516 square miles of Pima County in the heart of the Sonoran Desert and preserves a large number of exotic plant and animal species peculiar to that region of the country. Situated approximately 145 miles west of Tucson and about the same distance south of Phoenix, the monument takes its name from the cactus whose provenience reaches its northern extremity in the area bounded by the park. The monument boundaries on three sides--north, south, and west--are straight, and measure, respectively, nearly 28-1/2, 30, and 16-1/2 miles long. The southern boundary parallels for its entire length that between the United States and Mexico, while the western line adjoins the Cabeza Prieta Game Refuge. The monument's eastern edge runs irregularly for most of its 38-mile length, tracing the crest of the Ajo Mountains, which simultaneously comprise the western boundary of the Papago Indian Reservation.

Geologically, the area of the national monument includes several small, low-lying mountain ranges or parts thereof. Besides the volcanic Ajos, which stretch for 15 miles along the eastern perimeter of the park and which possess elevations sometimes exceeding 4,800 feet, there are the Diablo Mountains, a small, rocky cluster rising as a western spur of the Ajos. The position of the Diablos represents a rough demarcation between the sweeping Ajo Valley, paralleling its adjacent namesake range, and the Sonoyta Valley, whose plains spread south into Mexico along the Ajos and the subordinate Santa Rosa Mountains. Ten miles from the Ajos, across the alluvial plain in the northern part of the monument, lie the Bates Mountains; above them near the northern line are the Growlers. South of the Bates range lie the Puerto Blanco Mountains, also of volcanic origin and throughout the years the scene of major mineral exploitation in the park area. Minor granitic ranges surround the Puerto Blancos--the weathered and worn Sonoyta Mountains to the south, the similar Quitobaquito Hills to the west, and the Cipriano Hills slightly northwest. Southwest of the Puerto Blancos is La Abra Valley ("the Open Place"), which, like the Ajo and Sonoyta valleys, exhibits the flora and fauna so typical of this country. The La Abra Valley land slopes gently south towards the nearby Sonoyta River over the border in Mexico. The whole of the rugged land area now within Organ Pipe Cactus National Monument is etched by numerous dry washes that in peak rainy periods (despite an average low rainfall) carry cascading floodwaters from the mountains.

The climate of the Organ Pipe region is normally hot and dry with summer temperatures often hovering between 100° and 120° Fahrenheit--in the shade! The inhospitality of this desert terrain, along with its consequent lack of water, has in the past militated against permanent human occupancy. Early routes through the land were usually no more than primitive trails leading between watering places. Today the National Park Service maintains several gravelled scenic routes, all adjoining Arizona State Highway 85. This road cuts across the monument from Ajo, twelve miles north of the park, and runs past park head-

quarters and the visitors center south to Lukeville and the immigration station on the Mexican border.¹

1. The above brief description is drawn from Kirk Bryan, *The Papago Country, Arizona* (Washington: Government Printing Office, 1925), pp. 29, 215, 217, 218; and James M. Eden, "A History of Organ Pipe Cactus National Monument, Arizona" (unpublished manuscript dated 1956 in the library of Organ Pipe Cactus National Monument), p. 1.

CHAPTER I: PREHISTORY AND ABORIGINAL INHABITANTS

A. The Earliest Residents

Man has lived in the American Southwest for at least 12,000 years and perhaps longer. Human presence there has been established by archeological research, notably that conducted at Ventana Cave, Arizona, in the northern part of that region of northern Sonora and southern Arizona designated "Papaguería" by the early Spanish missionaries. Investigations at Ventana disclosed soil stratification reflecting major occupational changes over time among the indigenous Indian populations who lived there. The earliest inhabitants, represented by the lowest levels in the earthen cave floor, were hunters and gatherers; their residue included bones of extinct animal species, stone scrapers, projectile points, and grinding implements--all signifying that these people eked an existence stalking wild game and collecting seeds and roots. They neither grew crops nor manufactured pottery, and they belonged to what archeologists term the San Dieguito Complex. Bands of these nomadic people roamed a wet, cool country searching for sustenance. They left behind a vague network of stone monuments, sleeping circles, and chopping and scraping tools as remnants of their existence. It is postulated that this culture withdrew about 9,000 years ago with the onset of hotter and extremely arid conditions. Possibly for as many as 4,000 years thereafter the region seems to have been drought stricken and thus virtually uninhabited on a permanent basis. The San Dieguitoans moved north, or perhaps west towards the Gulf of California, thereafter only rarely venturing into the climatically restricted zone now embracing Organ Pipe Cactus National Monument.¹

B. The Amargosans

Another more socially complex culture eventually succeeded the San Dieguitoans during the first century A.D. By that time a cooler climate had returned, once more facilitating human occupation. Evidence of agricultural pursuits appears in the uppermost strata of the Ventana Cave floor, showing the presence of a sedentary people who moved into the region from the north and who thrived there until approximately 1400 A.D. Archeological remains of this Amargosan culture included corn, pottery, stone artifacts, cotton fabric, and basketry items. The Amargosans practiced an innovative pressure flaking technique in their manufacture of projectile points. Moreover, there is indication that they made ample utilization of accessible food resources, both plant and animal, including large game, and they fashioned practical utensils from shells garnered from the Gulf of California. Amargosan tribesmen seemingly ranged all

1. For an analytical assessment of the Ventana Cave discoveries, see Emil W. Haury *et al.*, *The Stratigraphy and Archaeology of Ventana Cave Arizona* (Tucson and Albuquerque: University of Arizona Press and University of New Mexico Press, 1950). An overview of archeology in the American Southwest is in John C. McGregor, *Southwestern Archaeology*, 2d ed. (Urbana: University of Illinois Press, 1965).

through the desert country in the vicinity of the present international boundary. Articles found in the uppermost strata of Ventana Cave as well as elsewhere in the Papaguería imply that the Amargosan culture constituted the antecedent of those aboriginal populations living there in more recent times.²

C. Archeology of the Monument

Archeological examination of that part of Papaguería including Organ Pipe Cactus National Monument occurred in the early 1950s under the direction of Paul H. Ezell of the University of Arizona. Ezell accumulated data from 100 locations within and outside the park, mainly rock shelters, campsites, quarry/workshops, and trail sites. His survey, though not intensive and therefore inconclusive, proposed that early Indians were drawn into the area because of the presence of food plants, such as mesquite, saguaro, and pitahaya or organ pipe cactus, and the existence of *tinajas*, or natural rock water tanks, in the mountainous areas of this otherwise parched land.³ Ezell likened the people to Great Basin tribes in terms of social and political organization:

These people probably had little in the way of leaders or government. The band may well have consisted of only a family or so, all of them probably related, and leadership merely that control exercised by an individual recognized as the head of the group. Even speculations are hardly profitable on such aspects of their culture as marriage customs, family organization, etc.⁴

It is clear that the advent of agriculture did not drastically alter native economies in the monument area. Except possibly for the playas west of the monument, seasonal horticultural pursuits did not flourish there. Men entered the region primarily to seek supplemental sustenance. Perhaps the Ajo Valley functioned as a trade corridor, allowing diverse aboriginal groups to meet and exchange goods and ideas. The archeological findings of Ezell and others

2. McGregor, *Southwestern Archaeology*; Julian D. Hayden, "A Summary History and Prehistory of the Sierra Pinacate, Sonora," *American Antiquity* 32 (July 1967):335-44; Julian D. Hayden, "Of Hohokam Origins and Other Matters," *American Antiquity* 35 (January, 1970):87-93. Synopses of these significant publications appear in National Park Service, *Environmental Assessment, Proposed Master Plan, Organ Pipe Cactus National Monument* (Denver: National Park Service, 1975), pp. 26-27; and National Park Service, "Resource Management Plan, Organ Pipe Cactus National Monument" (draft manuscript, Tucson: Arizona Archeological Center, 1976), pp. 4-5. The successive cultures that inhabited the Ventana area after the Amargosans were Chiricahua, San Pedro, Hohokam, and Papago. McGregor, *Southwestern Archeology*, p. 129.

3. Paul H. Ezell, "An Archeological Survey of Northwestern Papagueria," *The Kiva* 19 (Spring, 1954):1-3, 5.

4. *Ibid.*, pp. 21-22.

support that conjecture. Furthermore, the region is accessible from several directions; doubtless Ajo Valley furnished a ready avenue for Arizona tribes desirous of pursuing trade in what today is Mexico. Such speculation is intriguing. Hopefully the materials located thus far will stimulate even further examination of the monument grounds, inquiring more precisely into the nature of its prehistorical tenants.⁵

D. The Hohokam and Piman Peoples

Some of the ancient peoples who traversed this part of the desert en route to the Gulf of California were called Hohokam. Their population centered in the area of the upper Salt and Gila rivers, north of the monument. Hohokam tribesmen passed through the monument lands on their way to collect shells and salt in the Gulf waters. It is believed that the Hohokam, now long extinct, were related to modern tribes like the Pimas and Papagos whose known pasts strongly affirm such historical linkage.⁶ Closely aligned linguistically and culturally were the Quahatikas, essentially a branch of the Pimas, and the Sobaipuris, who affiliated themselves with the Papagos. Like their larger cousin tribes, the Quahatikas and Sobaipuris spoke dialects derived from the Piman division of the Uto-Aztecan language stock. The former tribe occupied the desert some fifty miles south of the Gila River in present Pima County. The Sobaipuris eventually joined the Papagos in whose territory they lived; ultimately they became extinct as a tribal entity.⁷

E. The Papagos

The Papagos represent one of the largest and widest-ranging Indian tribes to inhabit the Southwest. Their name means "bean people," a description somewhat scornfully thrust upon them by their Pima neighbors to the north who enjoyed horticultural diversity and who disdained the Papagos' reliance on beans alone. The Papagos' term for themselves means "people of the desert," as distinguished from their Pima relatives, whom they called "people of the river."⁸

5. *Ibid.*, p. 1; Charles A. Cook, "A Documentation of the Arizona Papaguera with Special Reference to Organ Pipe Cactus National Monument" (unpublished manuscript dated 1967 in the library of Organ Pipe Cactus National Monument), pp. 32-33, 35-36.

6. The most recent and comprehensive study describing Hohokam culture appears in Emil W. Haury, *The Hohokam: Desert Farmers and Craftsmen. Excavations at Snaketown, 1964-1965* (Tucson: University of Arizona Press, 1976).

7. John R. Swanton, *The Indian Tribes of North America* (Bureau of American Ethnology *Bulletin* 145, 1952; reprint ed., Washington: Smithsonian Institution Press, 1968), pp. 363-64.

8. *Ibid.*, p. 357; Cook, "Documentation of the Arizona Papaguera," p.45. "Bean people" translates from "papáh," meaning "beans," and "óotam," for "people." The Papago word for themselves is "Tono-oóhtam." Swanton, *Indian Tribes of North America*, p. 357.

1. Economy

The Papagos practiced hunting, gathering, and farming economies that required a migratory existence for at least part of the year. Patrilineal families belonged to tiny villages, termed *rancherías*, which were located in the broad valleys and occupied intermittently through the year. At the *rancherías* each summer the Papagos grew squash, corn, and beans. Late summer rains nourished the crops prior to the harvest, following which the Indians departed the *rancherías* for outlying hilly areas. There they spent the winter collecting edible vegetation and hunting game. In either winter or summer locations the Papago villagers maintained a ceremonial dwelling described as the Rain, or Cloud, House, where important political and religious matters were discussed and decided. The sacred houses exhibited the independence and individuality that characterized the *ranchería* system.⁹

2. Distribution

The Papago *rancherías* can be classified as belonging to one or another of four arbitrary geographical districts discernible in Papaguera. Anekam included the communities situated in the upper Santa Rosa Valley northwest of present-day Tucson; Hobóla took in the villages even further northwest, in the area of present Maricopa and on west through Gila Bend; Tótokvan, or Kikima, lay along the lower and middle reaches of the Santa Rosa Valley and the Comobabi Mountains west of Tucson; and Kokeleroti stretched further southward. Additionally, there were the Sand Papagos, or Areneños (sand people), who retained enough separate cultural elements to make them more recognizable as a tribal unit distinct from the Papagos proper. The Areneños roamed to the west, from the country of the present national monument south into Sonora, Mexico, towards the Gulf of California.¹⁰ Two prehistoric Papago villages important in their relation to the country bounded by the monument were those at Sonoita (also spelled "Sonoyta"), just across the international border in Sonora, and at Quitobaquito, some fifteen miles northwest of Sonoita and within the national monument.¹¹

9. Bryan, *The Papago Country*, p. 24; Papago Tribe of Arizona, *Facts about the Papago Indian Reservation and the Papago People* (Sells, Arizona: Bureau of Indian Affairs, 1972), p. 14.

10. This arrangement is according to Bryan, *The Papago Country*, p. 25. A detailed listing of Papago subdivisions and villages is in Swanton, *Indian Tribes of North America*, pp. 358-59. Frederick Webb Hodge termed Quitobaquito "one of their westernmost *rancherías*." Hodge, ed., *Handbook of American Indians North of Mexico*, 2 vols. (Bureau of American Ethnology *Bulletin* 30, 1907; reprint ed., Totowa, New Jersey: Rowman and Littlefield, 1975), 2:200.

11. Swanton, *Indian Tribes of North America*, p. 359. "Sonoita" and "Sonoyta" are interchangeably applied to the community, the river, the valley, and the mountains of that name; the latter spelling seems preferred in older historical documents, while "Sonoita" is more modern. The writer has opted to use the modern spelling only in reference to the community of that name.

3. Political and Social Conditions

Politically autonomous units, the Papago villages nevertheless carried on trade with one another and assisted each other in matters involving warfare and the sharing of food and other necessities. Evidently some villages were regarded more highly than others, and possibly the smaller units were offshoots of larger ones. In the parent communities were headmen who loosely governed activities in the related villages and who were in return advised by the principal family headmen from those rancherías. The system constituted an informal federation of related communities whose mutual existence benefited the entire tribe.¹²

Much of the intratribal dynamics of Papago society remains unknown. Geographer Carl Lumholtz wrote that the Papago tribe contained five clans, two of which were categorized as "red velvet ants" while the other three were called "white velvet ants." According to Papago mythology the "whites" overcame the "reds" in a bitter war of extermination; thus today there are fewer red velvet ants than white velvet ants. The meaning of the names of each of the five groups has been lost.¹³

Most of the Papago rancherías were situated near springs or some other ready water source, such as a hand-dug well. The tribesmen lived in shelters built from such native materials as grass and ocotillo. Ribs from dead saguaro cacti supplied a strong, hard wood used to construct Papago homes and garden enclosures.¹⁴ From the rancherías Papago traders roamed far and wide, bartering with other villages, with their Pima relatives, and sometimes with tribes inhabiting the margins of their land. The hostile nature of the San Carlos Apaches northeast of Papaguería effectually impeded Papago interest in that direction. Other neighbors included the Maricopa Indians along the western part of the Gila River, and the Yavapai and Yuma tribes located even farther west.¹⁵

F. Papago Relations with Outsiders

The first Europeans encountered by the Papagos were the Spaniards, who arrived during the sixteenth century. The subsequent history of the tribesmen

12. Cook, "Documentation of the Arizona Papagueria," pp. 46-47.

13. Bryan, *The Papago Country*, p. 25; Carl Lumholtz, *New Trails in Mexico: An Account of One Year's Exploration in North-Western Sonora, Mexico, and South-Western Arizona, 1909-1910* (New York: Charles Scribner's Sons, 1912), pp. 354-55. A somewhat dated but otherwise exceptionally fine article about the Papagos is in W. J. McGee, "Papagueria," *National Geographic Magazine* 9 (August, 1898):345-71. See also the classic treatment of this tribe in Ruth Underhill, *The Papago Indians of Arizona and Their Relatives the Pima* (Lawrence, Kansas: Haskell Institute Press, n.d.).

14. Cook, "Documentation of the Arizona Papagueria," p. 51; D. T. MacDougal, "Across Papagueria." Reprinted from *Bulletin of the American Geographical Society* 40 (December, 1908):13.

15. Cook, "Documentation of the Arizona Papagueria," p. 39.

under Spanish dominion reveals a long period of alternating peace and violence. Although Jesuit missionary activity helped temper initial Papago recalcitrance, the Indians remained a problem for Spanish troops along New Spain's frontier. But as the Jesuits made inroads among the Papagos, the people became amenable and even encouraged the founding of missions in their country. Father Eusebio Francisco Kino brought the first cattle to the Papagos, a signal event in their history, for they soon developed into avid stockraisers. At the same time, however, the introduction of horses made infractious Papagos more difficult and elusive than ever before. Moreover, acquisition of horses by surrounding tribes had the effect of increasing in size and number enemy raids into the Papaguería. These incursions not only disrupted native tribes in the region, but curbed white settlement to the edge of the Spanish frontier.¹⁶

The threat of hostile neighbors caused the Papagos to band closer together, for a time forsaking the scattered rancherías to which they had been accustomed. These conditions lasted through the period of Mexican control after the fall of New Spain. Plundering Apaches occasionally used the Sonoyta Valley, now within Organ Pipe Cactus National Monument, as access into the agricultural lands of Mexican Sonora.¹⁷ This situation lasted into the era of American administration, and it was only after the Civil War that United States troops could be sent in force to subjugate the Apaches. Some of the Papagos assisted the army as scouts during these campaigns. Eventually the tribe settled on a reservation, incorporating traditional lands, assigned them by the United States Government.¹⁸

G. The Papagos and the Organ Pipe Country

1. Salt Pilgrimages

The Papagos' association with the Organ Pipe Cactus National Monument country was primarily due to their migratory character. The main attractions of the region were trade and the annual June ripening of the saguaro fruit. For several weeks each year Papago families frequented the monument area, gathering this cactus product in the Ajo and Sonoyta valleys. Water was available in springs, rock tanks, and wells, the latter dug in the nearby mountains.¹⁹ Besides the saguaro fruit harvest, however, Papagos were drawn across the monument grounds during their annual "salt pilgrimage," a trek usually several hundred miles long to obtain rock salt from the shores of the Gulf of California.

16. *Ibid.*, pp. 44, 46.

17. *Ibid.*, pp. 72-73.

18. *Ibid.*, pp. 63, 74-75. The Papago lands were ascribed reservation status in 1917. Edward H. Spicer, *A Short History of the Indians of the United States* (New York: Van Nostrand Reinhold Company, 1969), p. 100. For a recent and very general discussion of the Papagos in terms of their history and contemporary conditions, see Thomas Weaver, ed., *Indians of Arizona: A Contemporary Perspective* (Tucson: University of Arizona Press, 1974).

19. Cook, "Documentation of the Arizona Papagueria," pp. 50, 53.

These expeditions satisfied both practical and religious objectives: needed salt was obtained while at the same time tribesmen realized supernatural benefits from the experience. The salt party was composed of men from one village or from several. The participants began their journey in the spring, about March or April, after the winter ocean tides had receded and laid bare the *salinas*, the salt rock product of evaporating sea water left in shoreline depressions.²⁰ The main trail of the Indians crossed the present national monument, and a popular stopping place en route was at Quitobaquito.²¹ Some Papagos in the United States continue to make the yearly trip despite its prohibition by the United States Custom Service since 1930.²²

2. The Areneños

Most intimately connected with the western part of the Organ Pipe Cactus National Monument region were the Areneños, or Sand Papagos. Varying little in lifeways from other Papagos, these Indians inhabited the country southwest of the Growler and Puerto Blanco mountains, and were notably fond of the sandy terrain around the Sierra Pinacate part of Sonora, hence their local designation as the Sand Indians. A small division of the Papagos showing probable Seri and Pima ancestry, the Areneños apparently never numbered more than 150 persons. Their small population suffered in the nineteenth century both from disease epidemics and from attacks by Mexican troops operating in the border country. By 1900 any surviving Areneños were living around Sonoita, Sonora; near Ajo, Arizona; and at Quitobaquito and Bates Well, both now within the national monument. Their tribal identity has largely been lost through assimilation with the more populous Papagos.²³

As residents of the most arid and sparsely vegetated sections of the Sonoran Desert, the Areneños made full use of the food resources offered by their environment. They ate rabbits, mountain sheep, and other game, even lizards. They fished in the Gulf of California at selected times each year. The Areneños practiced farming on a limited scale, while saguaro and pitahaya fruit, roots, mesquite beans, and seeds composed a large part of their diet.

20. Kenneth M. Stewart, "Southern Papago Salt Pilgrimages, *The Masterkey* 39 (July-September, 1965):84, 86; Bryan, *The Papago Country*, p. 26.

21. Lumholtz, *New Trails in Mexico*, p. 269.

22. Stewart, "Southern Papago Salt Pilgrimages," p. 85.

23. Bryan, *The Papago Country*, pp. 26-27; Lumholtz, *New Trails in Mexico*, p. 332; Cook, "Documentation of the Arizona Papaguaria," p. 69; Ezell, "Archaeological Survey," p. 24. Some Areneños settled in the vicinity of Dome, Arizona, and have managed to retain their tribal uniqueness. *Ibid.* Anthropologist Julian Hayden recognizes two groups of Areneños that were geographically separated. The "Pinacateños" lived in the Pinacate country of Sonora, while the "Aliwaipas" inhabited the area around Quitobaquito. "A Summary History and Prehistory of the Sierra Pinacate, Sonora," cited in National Park Service, *Environmental Assessment*, p. 27.

Water was of utmost importance, and their survival in the desert rested at all times upon knowledge of its location.²⁴ The Areneños did not make pottery; what they had they imported through trade with Yuma Indians to the west and Papagos to the east. Like the Papagos, the Areneños were subject to attacks by hostile Apaches, and these raids must have had an inhibiting impact on Areneño roaming patterns.²⁵ Archeological evidence of the Sand Papagos' occupation of the monument lands has been found at Quitobaquito. Areneño peregrinations in the area north of Quitobaquito must have been seasonal as well as dependent on the amount of surface water available in the mountains around Dripping Springs. Probably the dearth and unpredictability of water resources prevented permanent expansion of the Areneños throughout the Organ Pipe country.²⁶

24. Bryan, *The Papago Country*, p. 27; Lumholtz, *New Trails in Mexico*, p. 330. For details of the San Papagos' material culture, see *ibid.*, pp. 331-32.

25. See Tom Childs (as written to Henry F. Dobyns), "Sketch of the 'Sand Indians,'" *The Kiva* 19 (Spring, 1954):38-39.

26. National Park Service, *Environmental Assessment*, p. 28; National Park Service, "Resource Management Plan," p. 3; Cook, "Documentation of the Arizona Papagueria," pp. 67, 69.

CHAPTER II: SPANISH EXPLORERS AND MISSIONARIES

A. Early Adventurers

European penetration of the Papago lands now part of Organ Pipe Cactus National Monument possibly began as early as 1540, during Francisco Vasquez de Coronado's expedition to find the fabled Cibola beyond the northern reaches of New Spain. Captain Melchior Diaz, sent overland from Sonora to the Colorado River to effect a junction with Coronado's supply ships, may have traversed the monument grounds. Diaz failed in his mission, the ships having returned to New Spain, leaving him to retrace his journey back to Coronado along a route today thought to lie between Yuma, on the Colorado, and Sonoita, just south of the monument. It was on this return trek that tragedy struck; while hunting, Diaz impaled himself on his lance and died after weeks of prolonged suffering. He was buried somewhere along the trail, perhaps within the present boundary of the park. While Diaz's presence in this exact area is purely speculative, he certainly was the first European to travel in the proximity of the monument lands.¹

B. Entrada of the Missionaries

Following the Diaz party's sojourn, the desert country around Sonoita saw no further Spanish activity for almost seventy-five years. The land continued to be used by the Papago Indians and their Areneño cousins: it was this occupation that ultimately evoked the interest of New Spain, which perceived the promise that the native inhabitants held for the Catholic missionaries, those harbingers of Spanish civilization in the New World. Early in the seventeenth century New Spain arranged a treaty with the Yaqui Indians of southwestern Sonora. The document inaugurated the Spanish mission system along the frontier, and by 1613 Jesuit priests were active in Sonora.² Even so, northward extension

1. Herbert E. Bolton believed that Diaz's route approximated the later Camino del Diablo--"the Devil's Highway." *Coronado, Knight of Pueblos and Plains* (New York and Albuquerque: McGraw-Hill Book Company, Inc., and University of New Mexico Press, 1949), pp. 169-70. There is some evidence that Diaz travelled over the country south and west of the national monument. Wrote Ronald L. Ives: "Certain identification of Diaz' route awaits either discovery of documents not known to exist, or the finding of Diaz' grave, which may . . . be somewhere along the Camino del Diablo. . . ." "Mission San Marcelo del Sonoydag" (unpublished manuscript in the library of Organ Pipe Cactus National Monument), p. 2. Charles A. Cook stated that Diaz died near the Colorado River and never traversed the monument country. "Documentation of the Arizona Papagueria," pp. 86-87. Two sites along the Ajo range in the monument nevertheless commemorate Diaz's presence in the area--Diaz Peak and Diaz Spire; Eden, "History of Organ Pipe Cactus National Monument," p. 6.

2. Cook, "Documentation of the Arizona Papagueria," p. 87.

of the Christianizing effort was slow; exploration and realization of missionary potential in the area of modern Arizona waited over half a century more, until the arrival in 1867 at Dolores, Sonora, of Father Eusebio Francisco Kino.³

C. Father Kino and the Spanish Frontier

An indefatigable traveler and worker in behalf of his calling, Kino's contributions to the settlement of present northern Sonora and southern Arizona were immense. For more than twenty years he labored for Catholicism, establishing missions for his proselytes throughout *Pimeria Alta*. Kino established new routes across the mountains and deserts, built numerous missions, introduced domesticated animals among the Indians, and by his journeys and exploration extended the boundaries of knowledge about New Spain's northernmost provinces. Kino's travels brought him into what is now southern Arizona no fewer than fourteen times; he was the first to explore the vast desert country west of present Tucson up to Casa Grande and south of the Gila River.⁴ Certainly Kino traversed much of the land now encompassed by Organ Pipe Cactus National Monument in the course of his explorations; he positively visited Quitobaquito and the Ajo Valley.⁵

1. Exploring the Papaguería

In 1687 Father Kino established his first mission in northern Sonora, along the San Miguel River about 60 miles southeast of the present border town of Nogales. The mission, Nuestra Señora de los Dolores, remained Kino's permanent headquarters for the next quarter century, and it was from Dolores that Kino departed on his memorable journeys of exploration and conversion. His first trek into what is now southern Arizona took place in 1691, when Kino and a fellow priest arrived at the Indian ranchería of Tumacacori, south of present

3. *Ibid.*

4. Frank C. Lockwood, *Pioneer Days in Arizona from the Spanish Occupation to Statehood* (New York: The Macmillan Company, 1932), p. 288. Biographical treatments of Kino are plentiful. The most painstakingly thorough is Herbert E. Bolton's massive work, *Rim of Christendom: A Biography of Eusebio Francisco Kino, Pacific Coast Pioneer* (New York: The Macmillan Company, 1936; reprint ed., New York: Russell and Russell, 1960). See also Frank C. Lockwood, *With Padre Kino on the Trail* (Tucson: University of Arizona Press, 1934); Hubert Howe Bancroft, *History of Arizona and New Mexico, 1530-1888* (San Francisco: The History Company, Publishers, 1889), pp. 372-407; and Fay Jackson Smith, John L. Kessell, and Francis J. Fox, S.J., *Father Kino in Arizona* (Phoenix: Arizona Historical Foundation, 1966). A recent and concise study of Kino, together with a guide to his established missions in Arizona and Sonora, is in Charles Polzer, S.J., *A Kino Guide: A Life of Eusebio Francisco Kino, Arizona's First Pioneer and A Guide to His Missions and Monuments* (Tucson: Southwestern Mission Research Center, 1974).

5. Cook, "Documentation of the Arizona Papagueria," pp. 104, 270.

Tucson on the Santa Cruz River.⁶ Later journeys took Kino west of Tumacacori; his ambition was to find a trail to California, at that time a supposed island lying west of Pimería Alta. In 1696 he reached the Sobafpuri Indians on the San Pedro River, and the following year Kino went as far as the Pima villages on the Gila. In 1698 the Jesuit was sent to explore that stream and it was during this endeavor that Kino first crossed through the Papago domain and entered the lands now bounded by the national monument. Apparently he traveled via a Papago village called Akchin, or Acachin, located somewhere north of the Ajo Mountains, through the Ajo Valley to Sonoita. Kino's route thus lay directly across the eastern part of the park.⁷

2. Arrival at Sonoita

Kino's arrival October 7, 1698, at the Indian oasis of Sonoita was significant; the sleepy ranchería was soon transformed into an important secular and religious point on the Sonoran frontier. Kino recognized the potential of the community almost immediately, writing his superiors that Sonoita was "a post very suitable for a great settlement, because it has good pastures and rich lands with their irrigation ditches, and with water. . . ."⁸ During his initial visit, Kino baptized twenty-four Indian children, then headed west along the Sonoyta River to find the mouth of the Gila. He passed several small rancherías out of Sonoyta, and paused at Quitobaquito Springs. He called the spot San Serguio and described it as "a good place . . . , four more leagues along the [Sonoita River] arroyo. . . ."⁹ There he left the pack mules and baggage of his party and journeyed on to the nearby Gulf of California.¹⁰ Kino then returned through the Mexican town of Caborca to his base at Dolores.¹¹

6. Bryan, *The Papago Country*, pp. 7-8.

7. Cook, "Documentation of the Arizona Papageria," p. 102.

8. Quoted in Ives, "Mission San Marcelo del Sonoydag," p. 3. The Papagos' name for Sonoita is "Kavortkson," meaning "at the foot of the rounded hill," and sometimes abbreviated to "Son," meaning, simply, "at the foot of." The Spanish word "Sonoita," or "Sonoyta," possibly derived from the Papago term. Another possibility is that "Sonoita" means "the place where corn (sonot) will grow." Bryan, *The Papago Country*, p. 425.

9. Quoted in Bolton, *Rim of Christendom*, p. 401.

10. *Ibid.*

11. Bryan, *The Papago Country*, p. 9. For a detailed itinerary of Kino's first journey across the Papagería, including ranchería names, see *ibid.* Discussion of Kino's Sonoita visit in 1698 is in Eusebio Francisco Kino, *Kino's Historical Memoir of Pimería Alta, 1683-1711*, ed. Herbert E. Bolton, 2 vols. (Cleveland: Arthur H. Clark Company, 1919), 1:188. (This work includes Bolton's highly informative "Map of Pimería Alta, 1687-1711," showing all the places Kino worked in Arizona and Sonora.)

3. Establishing Mission San Marcelo del Sonoydag

Father Kino's interest in California paralleled his interest in the Indian community of Sonoita. He sought a land route into Baja California where Jesuit missions had earlier been established. Even more were projected there, and to Kino Sonoita loomed as a viable mission village from which provisions might be sent to the California stations; Sonoita would be the Jesuits' "jumping-off place" to the Baja missions.¹² It was that prospect that caused Kino to send to Sonoita a herd of thirty-six cattle, the nucleus of the ranch Kino would build to support a visita there. Kino revisited Sonoita in February 1699, passing through with Captain Juan Mateo Manje of the Spanish army enroute to visit Indian tribes near the confluence of the Gila and Colorado rivers. His 1699 journey marked the opening of a new trail, eventually called El Camino del Diablo ("the Devil's Highway"), that pushed across the stark, parched Sonoran Desert from Sonoita to Yuma, with part of the route bordering the present southern boundary of Organ Pipe Cactus National Monument.¹³ Late that year Kino and Manje again passed through Sonoita, now renamed San Marcelo del Sonoydag, on their way to visit Indians to the north and west.¹⁴

The establishment and occupation of the Mission San Marcelo del Sonoydag took much of Father Kino's attention over the next six years. He revisited the place numerous times and the significance of its location continued to impress him. "This post . . .," he wrote in 1700,

is the best there is on this coast. It has fertile land, with irrigation ditches for good crops, water which runs all the year, good pasture for cattle, and everything necessary for a good settlement, for it has very near at hand more than a thousand souls. . . . [Moreover,] there is a notable lack of water on the rest of this coast. . . .¹⁵

One can surmise that Kino considered in his estimate the bountiful Ajo and Sonoita valleys with their rich plant food offerings for the "thousand souls."

The year 1701 was especially important. In late March Kino climbed a high peak near the Colorado River and concluded for the first time that Baja California

12. Ives, "Mission San Marcelo del Sonoydag," p. 3; Bolton, *Rim of Christendom*, pp. 411, 495.

13. Bolton, *Rim of Christendom*, p. 411; J. J. Wagoner, *History of the Cattle Industry in Southern Arizona, 1540-1940* (Tucson: University of Arizona Press, 1952), p. 12.

14. Kino, *Historical Memoir*, 1:193, 194; Juan Mateo Manje, *Unknown Arizona and Sonora, 1693-1721*, trans. Harry J. Karns (Tucson: Arizona Silhouettes, 1954), p. 144; Cook, "Documentation of the Arizona Papaguera," pp. 107-8.

15. Quoted in Bolton, *Rim of Christendom*, p. 442. See also Kino, *Historical Memoir*, 1:208, 255, 256, 279ff.

was not an island. Work on the Sonoita visita was accelerated immediately with Kino personally supervising part of the project.¹⁶ On April 4 he reported "twelve small beams were cut for the first church of Nuestra Senora de Loreto de San Marcelo and its altar was made."¹⁷ Already the agricultural success of the location was clear; the tribesmen presented Kino with a planted wheatfield, and on his instructions they began work planting maize.¹⁸ Furthermore, the cattle-raising experiment was a success. Wrote Manje: "From 30 [36] cattle which we left during the year 1699, we found now 80 head."¹⁹

Kino returned to San Marcelo del Sonoydag only a few times after this. He came back briefly in November 1701, and visited again the following year.²⁰ After that Kino came no more until 1706. He passed through the community with a group of Spanish officials on his way to convince them that Baja California formed part of the continental mainland. At Sonoita Kino found his church freshly whitewashed and painted, the cattle herd succeeding, and the fields growing maize, beans, and wheat.²¹ In 1711, five years after this visit, Father Kino died in Magdalena, Sonora.

4. The Kino Legacy

It was Kino's initiative and enterprise that changed Sonoita from an Indian oasis into an important Spanish outpost on the Sonoran frontier. More immediately, Kino introduced European influence into the present area of Organ Pipe Cactus National Monument and produced fundamental changes in the native economy of the region. In addition, Kino's travels were responsible for the development of new routes through this country, notably El Camino del Diablo, which linked eastern Sonora with California. He traveled the length of the route four times between 1699 and 1702, and it was through these journeys that Kino formed his convictions about lower California. For nearly two centuries after Kino's death the trail served as a convenient, though hostile, avenue between Sonoita and the Colorado

16. Cook, "Documentation of the Arizona Papageria," pp. 110, 111-12.

17. Quoted in George B. Eckhart, *Missions of Sonora* (Tucson: Printed by the author, 1961), no page indicated. Bolton, *Rim of Christendom*, p. 496; Kino, *Historical Memoir*, 1:288. Manje recorded that much of the work was already accomplished when Kino's party arrived: "the Indians had built us a flat roofed chapel of *adobe* and beams. Francisco Pintor whitewashed the walls and painted it, and here we were given lodgings and the priests said mass." *Unknown Arizona and Sonora*, p. 167.

18. Manje, *Unknown Arizona and Sonora*, p. 158; Bolton, *Rim of Christendom*, p. 496.

19. *Unknown Arizona and Sonora*, p. 158.

20. Bryan, *The Papago Country*, p. 425.

21. Ives, "Mission San Marcelo del Sonoydag," p. 8; Cook, "Documentation of the Arizona Papageria," p. 115.

River. Its founding by Kino antedates by 100 years further Spanish attempts to join California and Mexico for reasons of overland transportation and communication.²²

D. Failure of the Missions and the Pima Revolt of 1751

Despite the surge of development in the region, Jesuit occupation proved transitory after Kino's demise. From the time of his last visit to Sonoita until 1743 there is scant record of visitations by churchmen, explorers, or government officials. In September of that year Father Jacob Sedelmayr passed through Sonoita on his way to the Gila River Valley.²³ Mission San Marcelo del Sonoydag seems to have waned drastically in the early decades of the eighteenth century. By 1751, however, this trend was reversed with the arrival in Sonoita of Father Enrique Ruhen and with the rebuilding of the church there.²⁴ But the missionary resurgence in northern Sonora was short-lived. In November 1751 the Pima Indians, angered by the missionaries, staged a violent revolt led by Luis Oacpicagigua, Pima governor of Saric, a Jesuit station about 100 miles southeast of Sonoita. The Pimas and Papagos swept through the missions from Caborca to Sonoita, inflicting death and destruction everywhere. Father Ruhen was killed and the church sacked and burned at Sonoita on November 22. When the onslaught subsided, all mission property there had been ruined. The Christianizing effort in the northern reaches of New Spain's northernmost province was finished for the time being.²⁵

E. Expulsion of the Jesuits

Four years after the Pima Revolt the Jesuits tried to resurrect the Sonoita mission by sending Father Ignaz Pfefferkorn among the tribesmen there. The Indians wholly resisted the overture, Pfefferkorn reported. They "had conceived

22. Eden, "History of Organ Pipe Cactus National Monument," p. 7; Lockwood, *Pioneer Days in Arizona*, p. 290; Cook, "Documentation of the Arizona Papaguera," pp. 106, 112-13, 280.

23. Ives, "Mission San Marcelo del Sonoydag," p. 10; Hubert Howe Bancroft, *History of the North Mexican States and Texas*, 2 vols. (San Francisco: The History Company, Publishers, 1886), 1:536.

24. The rebuilding started in 1750. Cook, "Documentation of the Arizona Papaguera," pp. 124-25.

25. Ives, "Mission San Marcelo del Sonoydag," pp. 14-15, 16; Bancroft, *History of the North Mexican States and Texas*, 1:544; Cook, "Documentation of the Arizona Papaguera," pp. 128-29. There is a pervasive legend that the bell of Mission San Marcelo del Sonoydag was taken before the church was destroyed and has survived in the hands of various parties down to the present. In a thorough study of the matter, Historian Ronald L. Ives concludes that the bell was probably mythical. The folklore is discussed in "The Bell of San Marcelo," *The Kiva* 29 (October, 1963):14-22.

such an aversion for Christianity that on no account did they wish ever again to tolerate a missionary among them."²⁶ To show their determination in this regard, the Indians staged another uprising. After its suppression, the Jesuits in 1757 made one last-ditch attempt to reimplant Catholicism in Sonoita. This, too, failed, mainly because of wholesale demoralization among both the missionaries and the natives.²⁷ Total collapse of the proselytizing effort came in 1767 when the Spanish King Charles III expelled the Jesuits from all the lands ruled by Spain. Missionaries belonging to that order were apprehended and returned to Spain for imprisonment. Some died from hardship. Others managed to elude the force of Charles's decree and sought asylum in foreign lands. The expulsion ended Kino's designs for Sonoita, the Papaguería, and all of Pimería Alta.²⁸

F. Deterioration of New Spain's Frontier

A few years after the Jesuits were expelled, some Franciscan missionaries visited Sonoita accompanying the exploring expeditions of Colonel Juan Bautista de Anza. One of them, Father Francisco Garces, noted some of the characteristics of the community that facilitated its use as a way station on the road to California, just as Kino had observed them nearly 100 years before.²⁹ Legend and stories have flourished over the years since Mission San Marcelo was demolished.³⁰ One is that a treasure of gold was buried at Sonoita during the Pima uprising, a strong rumor that in 1907 prompted some local citizens to excavate the San Marcelo ruins in search of the wealth. They found no riches, only a stone disc and several skeletons, among them one supposed to belong to the martyred Father Ruhen.³¹ The ruins of Mission San Marcelo were still prominent early in the 20th century to travelers approaching Sonoita from the east. They lay, said one observer, "in the shape of two low, rather insignificant, mounds, the smaller of which lies a short distance to the north of the other."³² Today all traces of Kino's church have been obliterated.

No major surveys of the country around Sonoita and the present national monument occurred from the time of Father Kino's death in 1711 to 1774. In the latter year Juan Bautista de Anza passed from Sonoita to Yuma along El Camino

26. Quoted in Ives, "Mission San Marcelo del Sonoydag," p. 21.

27. Cook, "Documentation of the Arizona Papagueria," p. 134.

28. Bolton, *Rim of Christendom*, p. 595.

29. Ives, "Mission San Marcelo del Sonoydag," p. 22; Cook, "Documentation of the Arizona Papagueria," p. 142.

30. See, for example, Ives, "The Bell of San Marcelo," as mentioned in fn. 25 earlier.

31. Cook, "Documentation of the Arizona Papagueria," p. 277.

32. Lumholtz, *New Trails in Mexico*, p. 175.

del Diablo on his way into California, returning by the same route. In 1776 Anza led emigrants north to the Gila and on into California where he founded San Francisco. He returned by way of El Camino del Diablo.³³ And in 1781, after the Yuma Indians rebelled, Lieutenant Colonel Pedro Fages was sent from Sonora to rescue refugees of that revolt. Fages's expedition passed through Sonoita and traversed El Camino del Diablo for much of its length.³⁴ Thereafter the Spanish presence was slight and inconsequential so far as it concerned the country around Organ Pipe Cactus National Monument.

33. Eden, "History of Organ Pipe Cactus National Monument," p. 7; Ives, "Mission San Marcelo del Sonoydag," p. 23.

34. Ronald L. Ives, ed., "Retracing the Route of the Fages Expedition of 1781," *Arizona and the West* 7 (Parts I and II, Spring-Summer, 1966), Part I:50, 70. A good summary of the late period of Spanish suzerainty appears in Sidney B. Brinckerhoff, "The Last Years of Spanish Arizona, 1786-1821," *Arizona and the West* 9 (Spring, 1967):5-20.

CHAPTER III: MEXICO'S NORTHERN TIER

A. Mexico and the Sonoran Frontier

The rule of Spain ended February 24, 1821, when the revolutionary government in Mexico City established the Republic of Mexico under the administration of Don Augustin Iturbide. On the northern frontier Spanish influence had steadily declined over the past fifty years, perhaps signalling the disintegration of Spain's power elsewhere in the land. The change of government in 1821 was for the most part imperceptible in northwest Sonora; indeed, with the abolition of the missions the residents of Sonoita and the other communities clung to the vestiges of previous times in their pursuit of agriculture and stock raising.

B. Development of Sonoita

1. Indian Troubles

As a result of the relative isolation of Sonoita and the adjacent country during the early part of the nineteenth century, information about the area is almost nonexistent. It appears that the native peoples of Papaguería continued to make occasional use of the Ajo and Sonoita valleys. Certainly the ranchería of Sonoita prospered, growing to include a Mexican Indian community besides its ancient Papago one. Relations between the Papagos and the Mexicans in Sonora evidently became strained in the 1840s because of private Mexican forays through Papaguería in search of mineral wealth. In 1840 the Papagos, soured by these invasions, revolted and a long period of distrust and suspicion began. Mexican settlers instigated trouble with the Indians in 1842 and 1843, then physically drove many of them out of northern Sonora. Eventually the Mexican government arbitrated some of the disputes between its citizens and the Papagos.¹

On top of these difficulties, Apache raids continued, especially in the eastern Papaguería, and the incursions sometimes cleared the country of Papago tribesmen who fled south and west. At mid-century, for example, the central Papaguería was almost completely abandoned in the wake of determined Apache encroachment. Many people settled around Sonoita and around the old mines at Ajo to the north; the intervening country and that east towards Tucson held little population.²

In the western Papaguería the Arenefios, or Sand Papagos, became the menace. Their nomadic existence often brought them onto the present monument grounds, but during the late 1840s the lure of travelers and goldseekers passing through their country along El Camino del Diablo proved to be their downfall. The

1. Cook, "Documentation of the Arizona Papagueria," pp. 164-65.

2. *Ibid.*, p. 173.

Areneños ambushed small parties of Mexican prospectors, not primarily for their gold and money, but for food, tobacco, and other necessities. The larceny and killings by the Sand Papagos inspired a primitive campaign against them by the Mexican army. Before long, troops operating in northern Sonora captured many of them. Others were killed, either by the soldier posses or by disease, and most of the surviving Areneños were assimilated into the larger Papago tribe. A few of them settled around Sonoita and similar communities in Sonora and present Arizona.³

2. Sonoita at Mid-Century

Throughout most of the nineteenth century Sonoita adhered to the tenets of its ancient past. After the Anza expeditions of 1774 and 1776 the village saw little activity until the discovery of gold in California reactivated its role as the vital water station on the eastern end of El Camino del Diablo. Sonoita owed its enduring existence to its proximity to the Sonoita River, whose waters irrigated the cultivated fields there before disappearing underground a few miles to the west. The townsite covered over 250 acres of farmland located south of the Sonoita River and running for some distance east of the rubble of the old Mission San Marcelo. Besides cattle, Kino had introduced horses, sheep, and goats. The residents of Sonoita were farmers, miners, and cattlemen whose gardens yielded beans, corn, melons, and gourds.⁴ Contemporary descriptions of Sonoita and the territory around it during the 1840s and 1850s are rare. A Mexican chronicler noted that the place was constantly the target of Apache raids and that it served as a landmark for travelers en route to California.⁵ But that was all. Somewhat more detail appeared in the report of Andrew Gray, who conducted a survey for possible railroad routes in southern Arizona following acquisition of the land by the United States. Gray visited Sonoita in May 1854 and described it as follows:

Sonoita . . . , a short distance below the limits of our territory, is an Indian town, where the Gobernador of the Papagos resides. There are also a few Mexican families. The valley is broad, with springs, and a small stream (the Sonoita) which flows a few miles in the dry months, when it sinks, like the river of San Diego in California. During the rainy season it extends for a long distance toward the Gulf.⁶

3. Childs, "Sketch of the 'Sand Indians,'" p. 29; Cook, "Documentation of the Arizona Papaguera," pp. 173-74, 176.

4. Ronald L. Ives, "Population of the Pinacate Region 1698-1706," *The Kiva* 31 (April, 1966):39.

5. Francisco Velasco, *Sonora: A Description of the Province*, trans. and ed. William F. Nye (San Francisco: H. H. Bancroft and Company, 1861), pp. 106-7, 140-43, as cited in Cook, "Documentation of the Arizona Papaguera," p. 163.

6. A. B. Gray, *The A. B. Gray Report, and Including the Reminiscences of Peter R. Brady who Accompanied the Expedition*, ed. L. R. Bailey (Los Angeles: Westernlore Press, 1963), pp. 85-87.

A more revealing portrait was drawn by Second Lieutenant Nathaniel Michler who accompanied the United States boundary survey party through the area in 1855. Sonoita, he wrote,

is a resort for smugglers, and a den for a number of low abandoned Americans, who have been compelled to fly from justice. Some few Mexican rancheros had their cattle in the valley near by. It is a miserable poverty-stricken place, and contrasts strangely with the comparative comfort of an Indian village of Papagos within sight.⁷

3. Sonoita in the 1880s and 1890s

Two years after this last description was penned, Sonoita and part of the land now within Organ Pipe Cactus National Monument achieved some prominence during the abortive filibustering venture into northern Sonora by Henry A. Crabb and his associates.⁸ After that the little Indian-Mexican community enjoyed a lazy existence producing vegetables and fruits mainly for its own consumption, since there were few markets nearby. The town boasted some vineyards and some orchards bearing figs and pomegranates. A visitor in the 1880s called the place "the principal [border] town west of Nogales."⁹ Then, in the early 1890s, the flooding Sonoita River forced abandonment of the town. Members of the United States survey group then re-marking the boundary observed that

Sonoita was formerly quite a flourishing little agricultural village, but heavy rains caused the river bed to sink so deep below the level of the surrounding lands that irrigation was attended with many difficulties, and by a lamentable want of energy and united action in constructing a dam to raise the level of the water the village fell into decay, family after family moving away, until now scarce a half dozen Mexican families remain, while abandoned fields and magnificent fig trees, dying for want of water, are painful reminders of past prosperity.¹⁰

7. "Lieutenant Michler's Report," in U.S., Congress, House, *United States and Mexican Boundary Survey; Report of William H. Emory, Major, First Cavalry and U.S. Commissioner*, 3 vols. 34th Cong., 1st sess., 1856, H. Ex. Doc. 135, 1:123.

8. Discussed in Chapter IV.

9. Jefferson Davis Milton, quoted in J. Evetts Haley, *Jeff Milton: A Good Man with a Gun* (Norman: University of Oklahoma Press, 1948), p. 156.

10. U.S., Congress, Senate, *Report of the Boundary Commission upon the Survey and Re-marking of the Boundary between the United States and Mexico West of the Rio Grande, 1891 to 1896*. 2 pts., 55th Cong., 2d sess., 1898, S. Doc. 247, pt. 1. "Report of the International Commission," p. 23.

But the villagers did not leave the vicinity; they moved 1-1/4 miles downstream, or west, to where the Papagos lived, and erected a new community, the present Sonoita, known as *Sonoita Nuevo* as opposed to the older *Sonoita Viejo*.¹¹ There they continued their subsistence farming well into the twentieth century.¹²

C. Santo Domingo

Following the shift of population from the old Sonoita to the new, some of the people moved a short distance west to live in one or another of the tiny communities of Buenos Aires, Pomo, El Pueblo, and Rosa de Castilla. There were also one or two Papago rancherías situated among these settlements, all located near the United States-Mexico boundary and thus adjacent to the present monument lands.¹³ Slightly west of these communities and about seven miles from new Sonoita stood Santo Domingo, where the Sonoita River passed in sufficient quantity to permit farming along its south bank. Santo Domingo attracted numerous residents from old Sonoita and became the most productive townsite in the immediate area besides Sonoita itself.¹⁴

1. Descriptions of the Community

One of the earliest nineteenth-century observations of Santo Domingo was that of Raphael Pumpelly, who traversed the border country in 1861. He reported that the settlement contained but two or three houses, "the last habitations before reaching the Gila river. . . ." At Santo Domingo Pumpelly encountered

Don Remigo Rivera, a revolutionary Sonoranian general. Don Remigo had withdrawn with his small force to the United States boundary, where he was awaiting a favorable opportunity for action. Leaving his men at Sonoita, he had come to pass a few days at San Domingo.¹⁵

11. Ives, "Mission San Marcelo del Sonoydag," pp. 25-26; Wilton E. Hoy, "Organ Pipe Cactus National Monument. Historical Research. Early Period" (unpublished draft manuscript dated October 1970 in the library of Organ Pipe Cactus National Monument), p. 22. The most detailed and perceptive account of Sonoita's past appears in *ibid.*, pp. 11-22.

12. Lumholtz, *New Trails in Mexico*, p. 176. A contemporary view of Sonoita in the early 1900s is in MacDougal, "Across Papaguera," pp. 5-6.

13. U.S., Congress, Senate, *Mexican Boundary Commission Atlas*. 55th Cong., 2d sess., 1897-98, S. Doc. Vol. 25, No. 247, Plate VIII; Hoy, "Early Period," p. 39.

14. Hoy, "Early Period," p. 22.

15. *Across America and Asia: Notes of a Five Years' Journey around the World and of Residence in Arizona, Japan and China* (New York: Leypoldt and Holt, 1871), p. 53.

Pumpelly incorrectly noted that Santo Domingo lay right on the boundary line. He stated that the trail west from the settlement ran south of the boundary for a few miles then entered the United States near a spring, presumably Quitobaquito.¹⁶

By late in the century Santo Domingo had developed substantially so that it rivaled Sonoita in its size and industry. Extensive grape vineyards lined the river, the basis for a flourishing wine production in the settlement. Alfalfa fields provided supplemental food for the free-ranging cattle around the town. Nearly 300 acres of land were being farmed there by Don Cipriano Ortega, reported the United States Boundary Commission, "the largest area under cultivation by one person near the entire boundary."¹⁷ By 1900 Santo Domingo had grown into a successful, self-sustaining community. Anthropologist W. J. McGee, who visited the settlement at about that time, described it thusly:

[Santo Domingo] is a feudal Mexican village of the type prevailing in the remoter districts. Owned and governed . . . by Don Cipriano Ortega, it comprises a chief residence, a habitation for the aduana (customs office), a smaller house occupied by a minor branch of the family, a church with horseshoe-shape bell arch, and three or four shops and stables, all of adobe, flat-roofed and one low story high; besides, there is an abandoned ore mill of half a dozen steam-driven arrastres, while half a dozen Papago Indian huts form the customary 'lower town.' The rancho is large, skilfully irrigated, and so productive that corrals and sheds are filled with vigorous stock and abundant grain - hay and barley. The nearest low spur of Sierra Sonoyta better attests the antiquity of the settlement than the few houses and inhabitants; for there the [Catholic] evangelists and their civil successors have laid seven or eight generations of their dead in cross-marked sepulchres, while hard by lies the much more populous ceremony of the Papago dependents -- those of the pagan dead in the form of a ki (house), but built of stones and strewn with the bones of sacrificed horses; those of the converts in similar form, though built of earth and decently marked with crosses outlined in pebbles.¹⁸

2. Cipriano Ortega, Ruler of Santo Domingo

The one individual who steered Santo Domingo to its climactic era was Cipriano Ortega, an energetic and imaginative Mexican, much of whose life and work remains shrouded in legend. Ortega seems to have been a man of bad reputation early in his career. A noted bandit, he reportedly robbed and murdered his

16. *Ibid.*, p. 54.

17. *Report of the Boundary Commission*, p. 23.

18. "The Old Yuma Trail," *National Geographic Magazine* 12 (March, April, 1901):129-30. For a general description of Santo Domingo at the peak of its existence, see Hoy, "Early Period," pp. 28, 29.

way to fame in northern Sonora, then helped rid the country of the troublesome Areneños, for which he won admiration from the local Mexican citizens. In time, Ortega settled in the Sonoita-Santo Domingo vicinity, assumed an avid interest in mining along either side of the border and, though illiterate, became a highly successful entrepreneur. His influence grew and he settled at the Santo Domingo hacienda as a wise administrator with a reputation for charity.¹⁹

At Santo Domingo Ortega ruled all aspects of everyday living. He built mills to grind the ore from his mines, and he and his family managed the production of diverse crops to support his workers. Ortega traveled all through the region, including much of that now within the national monument, and was responsible for the development of numerous roads and wells there.²⁰ There is every indication that, despite a generous, helpful disposition, Ortega could be ruthless in pursuing his objectives. One account states that some Papagos fled the country under threat of harm by Ortega after they refused to divulge to him the location of a particularly rich silver deposit.²¹

Ortega made his initial discoveries of gold- and silver-bearing quartz in the mountains around Santo Domingo in the 1870s. He worked locations in both Mexico and the United States and ground the ore in a burro-driven arrastra at his hacienda. The resulting bullion he sold in Yuma and in Hermosillo, Sonora. The mines around Santo Domingo proved especially rich, and Ortega allegedly netted \$14,000 for an investment of \$100. One of his wealthiest producers was La Americana, which Ortega supposedly purchased from an American prospector. His workers hauled ore from La Americana seven miles to Santo Domingo to be crushed. The mine bequeathed some \$80,000 in gold and silver under Ortega's control; he evidently made no attempt to extract and sell the quantities of copper and lead the ore contained. La Americana, later renamed the Victoria Mine, was located in the Sonoyta Mountains, now part of Organ Pipe Cactus National Monument.²²

3. Santo Domingo's Last Years

After Ortega died in 1904, Santo Domingo languished. The Mexican customs office moved out of the community, thereby curtailing the traffic that had previously passed through it. A few families stayed on and farmed its properties, but by the second decade of the twentieth century there remained little trace of

19. Hoy, "Early Period," no pagination indicated; Haley, *Jeff Milton*, p. 157; Cook, "Documentation of the Arizona Papaguera," p. 272.

20. Haley, *Jeff Milton*, p. 157.

21. Childs, "Sketch of the 'Sand Indians,'" p. 31.

22. Cook, "Documentation of the Arizona Papaguera," pp. 273, 274; Roy E. Appelman and Russell Jones, *Victoria Mine. Historic Structures Report, Parts I and II, Organ Pipe Cactus National Monument, Arizona* (Washington: National Park Service Office of Archeology and Historic Preservation, 1969), pp. 6-7.

Santo Domingo's former stature.²³ The original village no longer exists although the name survives, affixed to a tiny agricultural settlement near the old site.

D. Other Settlements

Just west of Santo Domingo was the tiny rancharía of Cerro Prieto, whose gardens bordered the Sonoita and lay adjacent to Ortega's own fields. A little more than three miles north and west was Quitobaquito, that historic spring which served as a signpost and gave relief to desert travelers over centuries of time. Kino first visited the spot and named it San Serguio. Later it became a familiar and reliable watering station for those pioneers braving El Camino del Diablo during the gold rush. At the end of the nineteenth century there was a small farming community at Quitobaquito which maintained its fields south of the international border between the springs proper and the Sonoita River. Three miles west of Quitobaquito lay the ruins of yet another settlement.²⁴ Of all these border communities, only Sonita remains today.

E. Local Roads and El Camino del Diablo

Numerous local roads and trails passed between these desert towns and rancharías and tied them together, in spite of their general independence from each other. Most trails paralleled the bed of the Sonoita River; some branched off at appropriate points, such as those from Quitobaquito leading north towards Gila Bend and that from Sonoita heading north to Ajo.²⁵ Just how old these routes were is impossible to determine; probably most evolved from very early Indian trails through the area. The most significant road in the region was certainly El Camino del Diablo, for it furnished the only direct connection between the country of northern Sonora and the outside world beyond the desert. Its use peaked in the 1850s and in the early 1860s while the California gold fever was at its highest pitch. Another route followed the Gila River far to the north, and it, too, picked up some of the Sonora traffic headed west.

But it was El Camino del Diablo that led most directly from northern Sonora. The route ran northwest out of Sonoita, past Santo Domingo and Quitobaquito, and entered United States territory somewhere between the present international boundary monument numbers 177 and 178. From there the road continued west in the United States passing over broad, desolate stretches to reach uncertain water sources near the Cabeza Prieta Mountains and in the Tinajas Altas Mountains. Near the latter place the road divided; travelers could go

23. Hoy, "Early Period," pp. 35-36. Wilton E. Hoy located Ortega's death certificate in 1967 in Altar, Sonora. *Ibid.*, p. 35.

24. Cook, "Documentation of the Arizona Papaguera," p. 271; Eden, "History of Organ Pipe Cactus National Monument," p. 9; MacDougal, "Across Papaguera," p. 7; McGee, "Old Yuma Trail," p. 131; *Mexican Boundary Commission Atlas*, Plate IX.

25. *Mexican Boundary Commission Atlas*, Plates VIII and IX.

north to the Gila by passing east of the mountains or they could keep moving northwest in a more direct line towards Yuma and the Colorado River.²⁶

Migrants over El Camino del Diablo had to contend with a variety of obstacles that threatened their lives. Besides the oppressive climate of the route they often encountered Mexican bandits, who robbed and murdered at will, and the dreaded Areneños who were more interested in the emigrants' food and clothing than in their wealth. Men frequently died of thirst and starvation, and an American appellation for the route was "Trail of Graves," because of the numerous rocky mounds with white crosses that marked its length.²⁷ During the international boundary survey of 1854-55, Lieutenant Nathaniel Michler traveled the Camino del Diablo. He left a classic description of the road and its environment:

Well do I recollect the ride from Sonoita to Fort Yuma and back, in the middle of August, 1855. It was the most dreary and tiresome I have ever experienced. Imagination cannot picture a more dreary, sterile country, and we named it the "Mal Pais." The burnt lime-like appearance of the soil is ever before you; the very stones look like the scoriae of a furnace; there is no grass, and but a sickly vegetation, more unpleasant to the sight than the barren earth itself; scarce an animal to be seen--not even the wolf or the hare to attract the attention, and, save the lizard and the horned frog, naught to give life and animation to this region. The eye may watch in vain for the flight of a bird; to add to all is the knowledge that there is not one drop of water to be depended upon from Sonoita to the Colorado or Gila. All traces of the road are sometimes erased by the high winds

26. See "Map of the Military Department of New Mexico. 1864" (Reprint, Tucson: Tucson Blueprint Company, n.d.). El Camino del Diablo paralleled the southern boundary of, but apparently did not enter, the lands presently part of Organ Pipe Cactus National Monument. Somewhat ambivalent statements on this question are in Cook, "Documentation of the Arizona Papageria," pp. vi, 161. Bryan claimed that "the Camino del Diablo is the route from Altar and Caborca, in Mexico, through Sonoita to California." He detailed the course of the route thusly: "The road went west from Sonoita along the valley of Sonoita River to Agua Salada and then turned northwest, passing by a represo near the south end of the O'Neill Hills to Las Playas, thence west by way of Tule Well and Tule Tank to Tinajas Altas. From Tinajas Altas one branch went north to Gila River, on the east side of the Gila mountains, and the other went on the west side; both followed the river down to Yuma, which was the beginning of the route in California." *The Papago Country*, p. 413. Inexplicably, there is no mention of El Camino del Diablo in Ralph P. Bieber, ed., *Southern Trails to California in 1849* (Glendale: Arthur H. Clark Company, 1937).

27. Hoy, "Early Period," pp. 94, 123; Cook, "Documentation of the Arizona Papageria," pp. 161-62; Lockwood, *Pioneer Days in Arizona*, p. 291; Ives, "Mission San Marcelo del Sonoitag," p. 25.

sweeping the unstable soil before them, but death has strewn a continuous line of bleached bones and withered carcasses of horses and cattle, as monuments to mark the way.

Although I travelled over it with only four men in the most favorable time, during the rainy season of Sonora, our animals well rested and in good condition, still it was a difficult undertaking. On our way to the post from Sonoyta we met many emigrants returning from California, men and animals suffering from scarcity of water. Some men had died from thirst, and others were nearly exhausted. Among those we passed between the Colorado and the "Tinajas Altas," was a party composed of one woman and three men, on foot, a pack-horse in wretched condition carrying their all. The men had given up from pure exhaustion and laid down to die; but the woman, animated by love and sympathy, had plodded on over the long road until she reached water, then clambering up the side of the mountain to the highest tinaja, she filled her boa, (a sort of leather flask,) and scarcely stopping to take rest, started back to resuscitate her dying companions. When we met them, she was striding along in advance of the men, animating them by her example.²⁸

Residents of Sonoita and the Papagos living at Quitobaquito often aided travelers who either went out on the Camino ill-prepared or who met misfortune on the trail. Most of those using the road were Mexicans. Intensity of use grew following the strikes in California in 1849 and that above Yuma on the Gila River in 1858. El Camino del Diablo, though riskier, continued as the principal route west from northern Sonora until full development of the Gila River route by the transportation interests later in the nineteenth century.²⁹ During its peak years the road must have brought considerable activity and influence to Sonoita and its neighboring communities. Yet its heyday was brief, and the ultimate demise of El Camino del Diablo meant a return by the border communities to the dormancy of their past.

28. "Lieutenant Michler's Report," in *United States and Mexican Boundary Survey*, 1:115.

29. A handy reference to those recorded treks over the Camino del Diablo from 1540 into the 1960s is in Hoy, "Early Period," pp. 96-121. Wilton E. Hoy located in the Arizona State Library the diary of an emigrant named George Kippen who passed over El Camino del Diablo in the summer of 1855. Excerpts from this important chronicle appear in *ibid.*, pp. 101-2. One traveler over the route was Raphael Pumpelly, who journeyed the Camino in 1860-61. Fifty-five years later, in 1915, the 78-year-old Pumpelly retraced his path in a Model T Ford. *Ibid.*, p. 114. As late as 1925, graves of those who perished along the Camino del Diablo could still be discerned there. Cook, "Documentation of the Arizona Papagueria," p. 162.

CHAPTER IV: THE AMERICAN INCURSION

A. The Land Below the Gila

The interest of the United States Government in the vast region now encompassing Organ Pipe Cactus National Monument dates from the 1840s. That decade, and the one preceding it, proved the harshest in terms of land loss in all of Mexico's history. First came the Texas insurrection in 1836 and the resulting de facto independence of the former Mexican state. Then, nine years later, Texas joined the United States and a simmering territorial dispute with Mexico erupted into war. Battles raged as the American invading force stormed its way towards the Mexican capital, capturing it in September 1847. By the Treaty of Guadalupe Hidalgo, ratified early in 1848, the United States received all of Upper California and that territory lying north of the Gila River in present Arizona.¹

Thus, the land of the present national monument remained part of Mexico following the peace of Guadalupe Hidalgo.² It was the discovery of gold in California soon after the Mexican War that raised American interest in the deserted wastes of northwestern Sonora and the area below the Gila. Both the

1. The Mexican cession included what later became the entire states of California, Nevada, and Utah, and parts of Wyoming, Colorado, New Mexico, and Arizona. Charles Van Doren *et al.*, eds., *Webster's Guide to American History: A Chronological, Geographical, and Biographical Survey and Compendium* (Springfield, Massachusetts: G. and C. Merriam Company, Publishers, 1971), map, p. 676.

2. "A New Map of Mexico, California & Oregon" (Cincinnati: J. A. and U. P. James, 1850; reprint, Tucson: Tucson Blueprint Company). While the region comprising Arizona did not figure prominently in the Mexican War, two United States Army expeditions passed through the relatively unknown country. Late in 1846 Brigadier General Stephen Watts Kearney followed the Gila River west across Arizona en route to California. At approximately the same time Lieutenant Colonel Philip St. George Cooke opened a wagon route from southeast Arizona to Tucson, then on to the Gila, following that route west to the Colorado. Bryan, *The Papago Country*, pp. 17-18. The United States gained its first official geographical knowledge of the region during the Kearney expedition. See William Hemsley Emory, *Notes of a Military Reconnaissance from Fort Leavenworth, in Missouri, to San Diego, in California . . . Made in 1846-7 with the advance guard of the "Army of the West"* (Washington: U.S. War Department Engineer Bureau, 1848). This document appears in both 30th Cong., 1st sess., S. Ex. Doc. 17 in vol. 3, and H. Ex. Doc. 41 in vol. 4; it is reprinted in *Lieutenant Emory Reports: A Reprint of Lieutenant W. H. Emory's "Notes of a Military Reconnaissance"* (Albuquerque: University of New Mexico Press, 1951). Emory's report contains no data on the country south of the Gila in the area of the national monument.

Gila River route and El Camino del Diablo drew increased traffic with the rush to the goldfields. Coincidentally, the need for a transcontinental railroad grew, the southern states agitating for a Pacific route with a southern terminus that would benefit their region of the country.³ Surveys of the new international boundary between the United States and Mexico served to stimulate the clamor for such a rail route,⁴ and in 1852 wealthy promoters in the South chartered the Texas Western Railroad and selected Andrew B. Gray to conduct its preliminary survey.⁵

B. The Gray Survey

Gray had previously served as principal surveyor of the Boundary Commission and he knew much about the region to be explored. He departed San Antonio, Texas, with his party on January 1, 1854, and eventually followed the thirty-second parallel west. Gray's survey covered 2,200 miles in five months. His report is especially significant because Gray and his men traversed some of the ground within the present monument; Gray's team was the first organized group of Anglo-Americans to enter the region south of the Gila.⁶

One who accompanied Gray's survey party was Peter R. Brady. While Gray stopped at Sonoita to take observations, Brady rode north about forty miles to the Ajo mine where he acquired mineral specimens. Brady's route took him directly through the present national monument. "We got water up in the mountains about half way to the mine . . .," he remembered.⁷ After leaving Sonoita, which Brady

3. Cook, "Documentation of the Arizona Papagueria," p. 165; Hoy, "Early Period," p. 78.

4. In 1850 President Zachary Taylor appointed John Russell Bartlett a commissioner to determine the location of the new U.S.-Mexico boundary. Bartlett completed extensive scientific explorations and surveys until early 1853 when he ran out of funds. Congress failed to appropriate further money for the project. Bartlett's narrative does not touch on the area of Organ Pipe Cactus National Monument. See *Personal Narrative of Explorations and Incidents in Texas, New Mexico, California, Sonora and Chihuahua, 1850-1853*, 2 vols. (1854; reprint ed., Chicago: Rio Grande Press, Inc., 1965). Other information regarding the boundary survey is in U.S. Congress, Senate, "Report of the Secretary of War, Communicating, In compliance with a resolution of the Senate, the report of Lieutenant Colonel Graham on the subject of the boundary line between the United States and Mexico." 32d Cong., 2d sess., August 1852, S. Ex. Doc. 121.

5. Hoy, "Early Period," p. 78.

6. *Ibid.* Gray's report, entitled *Survey of a Route for the Southern Pacific Railroad on the 32nd Parallel for the Texas Western Railroad Company* appeared in 1856. It is most accessible today in *The A. B. Gray Report*.

7. "The Reminiscences of Peter R. Brady of the A. B. Gray Railroad Survey, 1853-1854," in *The A. B. Gray Report*, pp. 215-16.

described as "a little stock ranch with a running stream very strongly impregnated with alkali and a beautiful green valley. . .," Gray's party pushed along the Sonoita River "through the Santo Domingo and Quitovaquito Papago villages" west to Agua Dulce, continuing its survey of a practicable railroad route.⁸

C. The Gadsden Purchase

Even as the Gray expedition progressed westward along the thirty-second parallel, events transpired that made the desired southern route more of a reality. On December 30, 1853--two days before Gray's team had left San Antonio--the American minister to Mexico, James Gadsden, concluded a treaty by which the United States, in return for \$10,000,000, acquired the coveted land below the Gila in present New Mexico and Arizona. Acquisition of the so-called "Gadsden Purchase," including the land now comprising Organ Pipe Cactus National Monument, was a product of the expansionist times following the Mexican War. Strong Southern influence cloaked the negotiations; Gadsden himself was a leading Southern railroad advocate and his appointment to Mexico came on the recommendation of Secretary of War Jefferson Davis, another advocate.⁹ The final treaty as ratified in mid-1854 excluded, at Mexico's insistence, an American port on the Gulf of California and settled on a boundary a short distance above the Gulf.¹⁰

D. Determining the Boundary

The Gadsden Purchase cleared the way for railroad development in the southern part of the Territory of New Mexico, which included Arizona.¹¹ The

8. *Ibid.*, pp. 215, 216.

9. In addition, the treaty was necessary to alleviate a vexing borderlands dispute unresolved since the treaty of Guadalupe Hidalgo. "The [Guadalupe Hidalgo] treaty stipulated no longitude or latitude; it merely declared that the boundary from El Paso to the Gila should coincide with a line drawn on a map, which was 'an 1847 reprint of an 1828 plagiarism, of an 1826 reproduction of part of an unsurveyed 1822 publication.'" Roger Dunbier, *The Sonoran Desert: Its Geography, Economy, and People* (Tucson: University of Arizona Press, 1968), p. 335.

10. Bancroft, *History of Arizona and New Mexico*, pp. 491, 492n., 493; Thomas A. Bailey, *A Diplomatic History of the American People*, 6th ed. (New York: Appleton-Century-Crofts, Inc., 1958), pp. 265-66; J. Lloyd Mecham, *A Survey of United States-Latin American Relations* (Boston: Houghton Mifflin Company, 1965), p. 348. Comprehensive studies of the 1854 treaty appear in Paul Neff Garber, *The Gadsden Treaty* (Philadelphia: Press of the University of Pennsylvania, 1923); Odie B. Faulk, *Too Far North . . . Too Far South* (Los Angeles: Westernlore Press, 1967); and B. Sacks, *Be It Enacted: The Creation of the Territory of Arizona* (Phoenix: Arizona Historical Foundation, 1964).

11. See Hermann Ehrenberg, "Map of New Mexico and the Territory acquired by the Gadsden Treaty, Also Showing the Proposed Southern or Texan Rail Road (continued)

location of the new international boundary necessitated new field surveys by both nations, and the joint enterprise started within six months of the Gadsden Treaty's ratification. Major William H. Emory headed the boundary commission for the United States, while José Salazar y Larregui served for Mexico. Emory had been topographer for Brigadier General Stephen W. Kearney's expedition along the Gila in 1846 and was familiar with the Arizona country. To save time Emory arranged for two survey parties; one headed by himself would determine the line west to Nogales, the other under Lieutenant Nathaniel Michler would cover the ground eastward to Nogales from the Colorado River.¹² The Boundary Survey lasted for a year, from December 1854 to December 1855.¹³ Michler's route took his group over El Camino del Diablo, through Quitobaquito, and into the environs of the present Organ Pipe Cactus National Monument. As previously noted, while at Sonoita Michler observed the town's lawless and degenerate element. He also pointed out that the Sonoita Valley, though not wide, could nonetheless support a grazing industry with its pasturage. Yet west of the town, commented Michler, "scarce a blade [of grass] is to be seen."¹⁴

The results of the Emory-Salazar survey of 1854-55 established the final location of the international boundary between the United States and Mexico. But the role of the boundary commission lapsed only temporarily after that determination. By the 1880s, because of increased settlement near the line, the growth of a mining industry, and the obliteration of the original boundary markers, which precipitated border disputes, there appeared a need to have the boundary relocated. In July 1882 the two countries entered into a treaty to that effect, and actual resurveying of the boundary began in 1892. The work lasted nearly two years and gained for the United States a wealth of scientific

11. (continued) Route" (copy in the Arizona Historical Society, Tucson); and "Map of Proposed Arizona Territory from explorations by A. B. Gray & others, to accompany memoir by Lieut. Mowry U.S. Army, Delegate elect." 1857 (copy in the Map Collection, University of Arizona Library, Tucson). The latter map shows a "practicable [railroad] route suggested for further examination" just above the "Rich Copper Mines" at Ajo.

12. Robert M. Utley, *The International Boundary United States and Mexico: A History of Frontier Dispute and Cooperation, 1848-1963* (Santa Fe: National Park Service, 1964), p. 41.

13. Charles A. Timm, *The International Boundary Commission United States and Mexico*, University of Texas Publication No. 4134 (Austin: University of Texas Press, 1941), p. 24; Cook, "Documentation of the Arizona Papaguera," pp. vi-vii.

14. "Lieutenant Michler's Report," in *United States and Mexican Boundary Survey*, 1:115, 123. Sonoita lay approximately one mile south of the new boundary and was the only original border town in the desert, dating from before the 1855 survey. Dunbier, *The Sonoran Desert*, p. 346.

data about the border region.¹⁵ To preclude further border difficulties, the United States and Mexico agreed in 1889 to extend the tenure of the boundary commission and it continued its work into the twentieth century.¹⁶

E. Rise and Fall of the Filibusterers

Resolution of the boundary question in the 1850s after the Gadsden purchase represented the culmination of American expansionist urges so far as contentious territorial acquisitions were concerned. Yet expansionist desires ran high throughout that decade, and even when the United States Government tempered its territorial drive the matter was seemingly relegated to the province of individual initiative. Unstable political and economic conditions in Central America and in Mexico prompted several filibustering expeditions into those regions. In 1853 a Tennessean named William Walker failed in an attempt to take over Baja California. He led expeditions into Central America in 1855, 1857, and 1860, and established himself dictator in Nicaragua before dying by execution in Honduras during the latter year.¹⁷ This type of intervention was not limited to Americans alone, for in 1854, a Frenchman, Comte Gaston Raousset de Boulbou, took advantage of conditions in Mexico and captured the Sonoran town of Guaymas. But he could not hold it and soon met defeat at the hands of angry Sonorans.¹⁸

F. The Crabb Expedition

1. Organization

Perhaps inspired by these events, an American named Henry A. Crabb in 1857 undertook a filibustering campaign in the Mexican state of Sonora. The expedition had direct bearing on the border country around the present national monument. Crabb was a prominent California legislator who had married into a powerful Sonoran family. Hoping to capitalize on the political chaos then rampant in that Mexican state, Crabb conceived an expedition to support the gubernatorial

15. Timm, *International Boundary Commission*, pp. 24-25; Bryan, *The Papago Country*, pp. 22-23. See also *Report of the Boundary Commission*, *passim*.

16. Timm, *International Boundary Commission*, pp. 26-27. A concise account of the disputes and resolutions concerning the line between the two countries appears in Utley, *International Boundary*.

17. Bailey, *Diplomatic History*, pp. 277-78.

18. Dunbier, *The Sonoran Desert*, p. 337. The whole range of French activities in Sonora is presented in Rufus Kay Wyllys, *The French in Sonora, 1850-1859* (Berkeley: University of California Press, 1932).

ambitions of Ignacio Pesqueira over claims of the incumbent governor, Manuel Gandara.¹⁹ By a physical show of support for Pesqueira, Crabb thought he would receive a land grant near the border in northern Sonora.

2. The March to Sonoita

The colonization plan ultimately failed. Setting forth with eighty-nine men from Los Angeles, Crabb led his filibustering party to Fort Yuma, then braved the dreaded El Camino del Diablo towards Sonoita. As arranged, Crabb's advance force would be followed by an army of nearly 1,000 men coming overland from the Gulf of California, which would be joined in Mexico by still another volunteer force moving south from Tucson. At Tule Tank, along the Camino, Crabb hurried forward with sixty-nine men, leaving the rest to follow at a more leisurely pace with the invalids. He reached Sonoita in March where he encountered enough opposition from the local populace to make him withdraw north across the border while trying to legitimize the appearance of his intent. In a statement addressed to the Mexican Prefect at Altar, Crabb announced his entrance into Sonora "in the expectation of making happy homes with and among you." "I have come," he wrote, "with the intention of injuring no one; without intrigues public or private. Since my arrival [at Sonoita] I have given no indication of sinister designs. . . ."²⁰ During this time Crabb probably camped on lands now within the national monument, and possibly at Quitobaquito, though this is unconfirmed. It is known that the group stopped at the American trading post run by Edward E. Dunbar 1-1/4 miles northwest of Sonoita (on land later known as Dowling Well and most recently as the ranch of Robert L. Gray, Jr.). Crabb soon bypassed Sonoita altogether and pushed into the interior of Sonora, his destination Caborca, 110 miles to the south, where he fully expected to be enthusiastically welcomed by Pesqueira's supporters.

3. Resting at Dunbar's Store

Meantime the twenty men left to recuperate at Tule Tank labored on along the Camino to Sonoita, then moved across the line to Dunbar's store to avoid trouble with the Mexicans. All but four eventually moved on, following Crabb's route towards Caborca. At Dunbar's store one of the remaining party, S. N. Bunker, penned a memorable letter dated April 16-17, 1857, part of which reflected growing concern over Henry Crabb's Sonoran venture:

We hear a continued strain of bad news about our men ahead of us from the Mexicans and Indians; but do not know what to make of it. The last report was that Crabb with ten men was advancing and was attacked by fifty Mexicans, which they

19. The possibility of a Crabb-Pesqueira conspiracy is discussed in Rodolfo F. Acuña, *Sonoran Strongman: Ignacio Pesqueira and His Times* (Tucson: University of Arizona Press, 1974), p. 33.

20. Crabb to "Don Jose" Maria Redondo, March 26, 1857, reproduced in Robert H. Forbes, *Crabb's Filibustering Expedition into Sonora, 1857* (Tucson: Arizona Silhouettes, 1952), p. 14.

cleaned out. The Mexicans got a reinforcement and general fight took place. The Americans took to an adobe building, which the Mexicans surrounded and finally set fire to, which caused our men to come out and the report says every one was killed. It is also said that 30 men are coming to take us. This is a rumor but we don't believe it is true.²¹

4. Disaster

Though based in rumor, Bunker's letter, as events later proved, was surprisingly accurate. By the time Crabb reached Caborca on April 1 his services were no longer needed by Pesqueira, who had assumed the governorship. Instead of the welcome Crabb had expected, Pesqueira had managed to unite the Sonorans as well as incite them against intervention by the Americans. At Caborca, Crabb's force met with ambush. After a siege of several days the surviving Americans, including Crabb, surrendered to the Sonoran troops and on the following morning all were executed. The sixteen men following Crabb from Sonoita were likewise intercepted and killed, and on April 17 Mexican soldiers stormed into the United States and killed the four men, including Bunker, who had remained at Dunbar's store. Their burial was accomplished by Papago Indians living in the vicinity. The 1,000-man army that Crabb hoped would support his colonization scheme never materialized, while a 26-man contingent going from Tucson to Crabb's relief met defeat and scattered outside of Caborca, its members forced to fight their way back across the border. Of the sixty-nine members who accompanied Henry Crabb into the Battle of Caborca, only a sixteen-year-old boy was spared by the victorious Sonorans. Thus ended the Crabb fiasco and all similar filibustering attempts into Mexico by American citizens.²²

G. The Vanguard of Settlement

Most Americans who came into the hostile desert environment of southwestern Arizona, and specifically the area of Organ Pipe Cactus National Monument, harbored no territorial designs against Mexico. Following the Mexican War most

21. Bunker's complete letter was published in the *Sonora, California, Union Democrat* on May 23, 1857, and in the *Sacramento Daily Union* three days later. The text is reproduced in Forbes, *Crabb's Filibustering Expedition*, pp. 11-12.

22. The most complete treatment of the Crabb expedition is in *ibid.*, but see also J. Y. Ainsa, *History of the Crabb Expedition into Northern Sonora: Decapitation of the State Senator of California, Henry A. Crabb and Massacre of Ninety-Eight of His Friends at Caborca and Sonoita, Sonora, Mexico, 1857* (Phoenix, Arizona, 1951); and Rufus Kay Wyllys, "Henry A. Crabb--A Tragedy of the Sonora Frontier," *Pacific Historical Review* 9 (June, 1940):183-94. The Crabb expedition against the backdrop of Sonoran politics is assessed in Acuña, *Sonoran Strongman*, pp. 29-39. The Battle of Caborca is treated in detail in Forbes, *Crabb's Filibustering Expedition*, pp. 21-23. The surviving 16-year-old was Andrew Evans, who forty years later at Yuma delivered his account of the Crabb affair. *Ibid.*, pp. 30ff. See also Hoy, "Early Period," pp. 9-10.

Americans passing through Sonoita and Santo Domingo were forty-niners traversing the southern route through Sonora to California. The land belonged to Mexico until the Gadsden agreement, and there evidently was no permanent settlement in the region by Americans until word of the treaty got around. Undoubtedly mountain men from the Gila River Valley occasionally passed across what is now monument land, and frontiersmen like James Ohio Pattie and Jedediah Smith perhaps came into this country during their peregrinations in southern Arizona.²³ So far as the Organ Pipe lands proper are concerned, the first permanent settlers presumably were Edward E. Dunbar and a man named Belknap, who, sometime in 1855 or shortly before, built the store and trading post just within the United States.²⁴ Dunbar's store figured prominently in the Crabb debacle in 1857. It also served as a stop for wayfarers along El Camino del Diablo.²⁵ Most of those who entered this desolate region kept moving. Probably most were illiterate; doubtless some were fugitives. In either case there was little need for them to maintain journals or diaries of their experiences. Some came to check on the mineral potential around Ajo and along the Ajo Valley;²⁶ but the early prospectors, too, were transitory. The climate of the country continued to discourage long-term association. As a result, settlement proceeded very slowly or not at all.

H. The Sentinel Campaign

It was only after the Civil War that Arizona Territory witnessed any major population growth. The end of that conflict brought United States army troops into the eastern part of the region to subjugate Apache raiding parties. Mineral interest was at its peak east of the Papaguería and settlement grew rapidly there, while southwestern Arizona remained a desert unfit for human occupancy.²⁷ In the 1870s, however, the *Arizona Sentinel* at Yuma launched a promotion campaign in its pages for the purpose of informing the public about the overlooked region of the territory, which it defined as "Our Southern Border." The area south of the Gila, the newspaper contended, had been avoided largely because of unruly Mexicans who pervaded the region murdering and robbing Americans who entered it. The army stayed away, maintained the *Sentinel*, because the Papago Indians who lived there remained peaceful. Miners kept out of the country

23. Cook, "Documentation of the Arizona Papagueria," p. 167.

24. Forbes, *Crabb's Filibustering Expedition*, p. 16.

25. The George Kippen Diary, Arizona State Library, Phoenix, contains some mention of the store in 1855.

26. Cook, "Documentation of the Arizona Papagueria," p. 271.

27. A good example of how this section of Arizona was ignored is its omission in the contemporary work by John Ross Browne, *Adventures in the Apache Country: A Tour through Arizona and Sonora, with Notes on the Silver Regions of Nevada* (New York: Harper and Brothers, Publishers, 1871; reprint ed., New York: Promontory Press, 1974). Chapter XXVIII of this book, entitled "The Papagoria," contains no information on the country around Organ Pipe Cactus National Monument, nor does the rest of the book.

because they erroneously likened it to the lands bordering the Gila--"alluvial, sandy, not rich in metals." The *Sentinel* editors went on to describe the borderlands as a promising region that Americans should inhabit. As an inducement for the army, the paper pointed out that "the Sonoita valley is one of many points [in that country] possessing superior advantages for a military camp; good water, grass, and a healthful climate."²⁸ Such favorable publicity undoubtedly did much to remove the feeling of uncertainty concerning the lands below the Gila. Beginning in the 1880s settlement increased there, partly because the press had encouraged it but mainly because the completion of the transcontinental railroad through southern Arizona allowed the industries of mining and cattle grazing to finally become profitable south of the Gila.

28. *Arizona Sentinel* (Yuma), February 8, 1879.



CHAPTER V: SCIENTIFIC SURVEYS AND BORDER SQUABBLES

A. The McGee and MacDougal Visits

Although actual settlement of the border area by Americans took place slowly, by late in the nineteenth century interest in the region was running high. The copper mines at Ajo were being developed and the country to the south around the present monument was attracting numerous prospectors. The land was also stimulating intellectual interest, and the period following the boundary commission's relocation work in the 1890s was marked by several notable scientific excursions. The first of these took place in 1900 when William J. McGee, an eminent ethnologist with the Bureau of American Ethnology and vice president of the National Geographic Society, led a group into northwestern Sonora and along the Camino del Diablo route to Yuma. The expedition produced much ethnological and geographical data and led to further scientific inquiries into the Papaguería.¹

Seven years after the McGee expedition, Dr. Daniel T. MacDougal, Director of Botanical Research at the Carnegie Desert Botanical Laboratory at Tucson, conceived of an exploration through Papaguería to the Pinacate Mountains in Sonora. MacDougal invited the prominent New York City naturalist William T. Hornaday to accompany him, along with several others, into the Sonoran Desert. The party left Tucson in November 1907 and travelled west to the northern end of the Ajo Mountains. Then they moved south and into the lands presently part of Organ Pipe Cactus National Monument. The MacDougal expedition got water at Walls Well at the extreme northern edge of the Ajos (now located just outside the east boundary of the park). The well provided the last water until Sonoita could be reached. After leaving Walls Well the expedition made a "dry camp" at the approximate location of the present monument headquarters and visitors center. There the men supposedly found the old grave of a Mexican mail carrier killed by the Apaches.² In the course of its exploration, the MacDougal Expedition visited Sonoita, Santo Domingo, and Quitobaquito, all in the vicinity of the monument. Its scientific findings were significant, especially those involving the Pinacate volcanic region of Sonora. The expedition proved successful because of the number of capable, scholarly men MacDougal took along with him. Hornaday was particularly valuable because he possessed knowledge of several facets of scientific endeavor and also had practical experience in taxidermy and

1. Hoy, "Early Period," pp. 79-80. See McGee's "The Old Yuma Trail," pp. 103-7, 129-39.

2. Hoy, "Early Period," p. 82; MacDougal, "Across Papaguería," p. 3; Roy E. Appleman and Russell Jones, *Blankenship Ranch. Historic Structures Report, Parts I and II. Organ Pipe Cactus National Monument, Arizona* (Washington: National Park Service Office of Archeology and Historic Preservation, 1969), p. 14.

photography. Hornaday was an effective writer too, and his popular chronicle of the expedition is factual and lucid in its presentation.³

B. The Lumholtz and Bryan Reconnaissances

The McGee and MacDougal explorations fueled incentive for two other scientific probes into the region early in the twentieth century. In 1909-10 the Norwegian geographer Carl Lumholtz led a team into the border country seeking data on the Papago Indians. Lumholtz visited numerous places now in the confines of Organ Pipe Cactus National Monument, including Quitobaquito and Bates Well, which is located in the north of the monument. Lumholtz's published account of his exploration contains much information about the country within and surrounding the monument and includes an important map of the Papaguería. During his journey, Lumholtz covered a broad region extending from the Gila Valley south to Magdalena, Sonora, and west to the Gulf of California.⁴ A survey different from Lumholtz's ethnological one was Kirk Bryan's. Bryan, a geologist at Harvard University, was selected in 1917 to complete part of a government-sponsored study of geological and ground water conditions in the Arizona and California deserts.⁵ Bryan travelled all through the Papaguería and spent much time studying the land formations and water table in the area now embraced by the monument. His report, published by the U.S. Geological Survey, is an invaluable guide to the monument lands and to the old trails that once crossed the area but no longer survive. It is at once the most substantive scientific and historical document available to any study of the land region now embraced by the monument.⁶

C. Immigration Problems

The scientific surveys offered familiarization with the desert lands along the international border, a line that MacDougal properly defined as "the most arbitrary and meaningless political boundary in America."⁷ The boundary was not fenced and was marked only by interally-spaced stone monuments erected by the commission in the 1890s. Around the turn of the century a great many foreigners took advantage of the unguarded border conditions and entered the United States. It took little effort to circumvent the tiny customs station at Sonoita, and while the United States Immigration Service patrolled the line, illegal aliens

3. Hoy, "Early Period," p. 84. See William T. Hornaday, *Camp-Fires on Desert and Lava* (New York: Charles Scribner's Sons, 1908). MacDougal published "Across Papagueria."

4. Hoy, "Early Period," pp. 85-86. See Carl Lumholtz, *New Trails in Mexico*.

5. Hoy, "Early Period," pp. 86-87.

6. Bryan's work is *The Papago Country, Arizona*.

7. "Across Papagueria," p. 1.

could usually cross over unmolested.⁸ Chinese and Japanese were, in fact, especially numerous during these years of restricted entry for persons of oriental ancestry. They usually came into Arizona via Altar, Sonora, to Sonoita, then traveled by foot over the scorching El Camino del Diablo to the Gila or Colorado rivers, a journey they were ill-prepared to take.⁹ In November 1907 Dr. MacDougal's expedition encountered just such a situation involving transient Japanese:

Within a few minutes after our arrival in Sonoyta we learned that a party of six Japanese had come up through Altar and Caborca and had evaded the immigration guard at the oasis, going out over the old desert highway across the border to gain the freedom of the United States. Disaster was quickly encountered, and two of the party returned for water and help which was freely given by the natives. Again they made the trial, passing our camp by a detour in the night. A day later we encountered one on the desert, worn and exhausted, who intimated by signs that he and a companion had become separated from the remainder of the party and that his friend lay ill in a distant copse along the streamway of the Sonoyta [River]. Supplies were furnished him and upon our return a few weeks later these two had made [their way] back to Sonoyta to recuperate from their struggle, while the fate of the remaining four remains unknown.¹⁰

Hornaday added that the Japanese had proposed to walk the entire distance from Sonoita to Yuma on El Camino del Diablo "without any outfit whatever, without arms, and with only two canteens for five men."¹¹ At Quitobaquito the aliens begged food and tobacco from an American named Reuben Daniels then living there.¹²

8. At the time the MacDougal exploring party came to Sonoita, the U.S. Inspector of Immigration was Jefferson Davis Milton, whose "official duty is to patrol the International Boundary between the Colorado River and Nogales, 'or as much thereof as may be necessary,' in order to beat back any waves of interdicted immigration that may roll up from the south." Hornaday, *Camp-Fires on Desert and Lava*, pp. 98-99.

9. *Ibid.*, p. 99; Hoy, "Early Period," p. 61.

10. MacDougal, "Across Papaguera," p. 7.

11. Hornaday, *Camp-Fires on Desert and Lava*, p. 125.

12. *Ibid.*, p. 129. Hornaday seems to have read more into this incident than it justified. Perhaps reflecting the times, he wrote:

Just *why* the Japanese should wish or need to know the possibilities of getting into the United States over the Devil's Road, is a question for a military critic. All I know about the Japanese mind is that 'it is sly, sir, devilish sly'; and

(continued)

Accounts of oriental ingenuity in entering the United States through the desert from Mexico became legendary around Sonoita and the illicit traffic, though inconsequential overall, probably ran high at times.¹³ But along with unlawful entrants there were problems involving smuggling operations, especially later in the twentieth century. During the Prohibition era illegal whiskey crossed the boundary in huge quantities; more recently drugs and narcotics smuggling have occupied immigration authorities on either side of the line. In 1930 ten acres of land on the United States side of the boundary was set aside for customs and immigration inspection. Ten years later a formal customs station was erected there and soon after a binodal Mexican-American community developed.¹⁴

D. Villistas and Carranzistas

Early in the twentieth century the unguarded nature of the United States-Mexico boundary offered easy refuge for victims of the turbulent state of Mexican politics. While events in no way emulated those of Francisco Villa's 1916 attack on Columbus, New Mexico, they nonetheless furnished some excitement in the border country between Sonoita and Ajo and, as such, contributed much to the history of the lands now in Organ Pipe Cactus National Monument. Tensions in the area of Sonoita ran high following the ascension to power in Mexico of Venustiano Carranza. Carranza and Villa had formerly fought together, but Carranza's refusal to implement badly-needed reforms in Mexico caused a schism between them. Villa's followers suffered as a result. In Sonoita the Carranza regime's attempt to confiscate cattle produced resentment towards the government. At least one man drove his livestock over the border onto the present monument grounds to avoid their being taken away from him.¹⁵

1. Villista Refuge in the United States

The monument lands also became a haven for avid Villistas following Carranza's victory in 1914. Early in 1915 a number of them crossed into the United States and posted themselves in Bull Pasture, an elevated plateau area containing grass and water located on the west slope of the Ajo Mountains and now within the monument. The justice of the peace from Ajo, together with two local cattlemen, went to Bull Pasture and arrested the group for disturbing the peace.

12. (continued)

it works while we sleep. Possibly there exists in Tokio an academic desire to know whether a fleet could find good lodging in the lower reaches of the Colorado River. . . .

Ibid.

13. See Lumholtz, *New Trails in Mexico*, p. 178.

14. Dunbier, *The Sonoran Desert*, pp. 348, 352-54.

15. Hoy, "Early Period," p. 74.

Soon after, the men were all given sanctuary in the United States by American immigration officials.¹⁶ There were more occasions when the Villistas availed themselves of Bull Pasture and other areas on present monument property.¹⁷ U.S. Army troops also occupied the area, vigilant for these unlawful Mexican incursions. They camped in Alamo Canyon, just north of Bull Pasture.¹⁸ Meantime, Mexican troops faithful to Carranza took over in Sonoita and much fighting occurred there between the soldiers and the local populace who supported Villa. Kirk Bryan, who was then in the vicinity, wrote that "the constant exactions of the soldiery nearly depopulated the town and the adjacent countryside."¹⁹ On top of all this certain unscrupulous Americans took advantage of the instability and conducted raids across the line near Quitobaquito to steal Mexican cattle, which they killed and skinned for the hides. These men supposedly operated from a base established at Cipriano Well, north of Quitobaquito and now on monument land.²⁰

2. U.S. Army Border Experiences

Early in 1917 the Villistas, freshly supplied with good arms and doubtless inspired by the imminent withdrawal of the American punitive force that had been sent into Chihuahua after Villa's marauders, managed to defeat the Carranzistas in Sonoita and took charge there. But their supremacy was short-lived; in June soldiers of Carranza recaptured Sonoita and drove the Villa troops out into the mountains where they continued to harass innocent parties travelling over the desert. United States National Guard troops stationed in Ajo watched the border uneasily, but no cause for outright intervention occurred.²¹ On one lively outing in 1917, a company of the First Arizona Infantry camped in Alamo Canyon and later at Walls Well. Once a mounted infantry detachment rode up to Bull Pasture after Villistas, but by the time the unit reached the basin the Mexicans had escaped. These soldiers later captured some Villistas, one of them in

16. Bryan stated that the Villistas numbered 450 strong. *The Papago Country*, pp. 358-59. Cook wrote that the force consisted of "a Mexican Colonel Reina, with approximately twenty to thirty men of the Villa army. . . ." "Documentation of the Arizona Papagueria," p. 293. Possibly these were separate instances.

17. See Hoy, "Early Period," p. 69a.

18. Hoy states that the troops belonged to Company B, 158th Infantry, but that there were some black troops, too. "Early Period," p. 73. Cook identifies troops camped in Alamo Canyon as Tenth Cavalrymen. "Documentation of the Arizona Papagueria," p. 293.

19. *The Papago Country*, p. 425.

20. Cook, "Documentation of the Arizona Papagueria," p. 288.

21. Hoy, "Early Period," pp. 69-70, 74. These troops were with the First Arizona Infantry and they conducted frequent patrols along the international boundary in the vicinity of the present monument. See *ibid.*

Alamo Canyon. The troops also camped briefly at Quitobaquito, which at that time had been deserted by its Papago residents.²²

E. Later Difficulties

Conditions on the border became settled after 1917, despite the continued instability of the Mexican government through the 1920s. Under the regime of President Plutarco E. Calles, however, there occurred a revival of tensions around Sonoita and elsewhere in northern Sonora. In April 1929 nearly 200 Mexican federal troops were stationed at Sonoita guarding against new trouble by revolutionaries.²³ Again, American soldiers reacted to the situation and took station at various places on the border. One contingent occupied the area now inside the national monument. These troops camped for several weeks at Dowling Well, 1-1/4 miles north of Sonoita, while they observed events across the line. Robert Louis Gray, Jr., who lived in the Organ Pipe area nearly all his life, remembered the tented encampment at Dowling Well and reported on how the Calles government dealt with the insurgents around Sonoita:

Above Dos Lomitas [the Grays' ranch located east of Sonoita and now within the land area of Organ Pipe Cactus National Monument] about four miles there were about 600 Yaqui [Indian] soldiers. . . . Rebels. They were going to take Sonoita. They didn't need but ten men to take it, but they didn't know that. My brother Jack and I watched them through binoculars from Dos Lomitas. . . . I was afraid to go talk to them as Jack wanted to do. I was afraid they'd keep us, stick a bayonet in us. The Mexican Government sent a plane over from San Luis or some place, one of those old planes, flying about 90 or 100 miles an hour. They circled the Yaquis, a wide circle. They had a homemade bomb. They dropped the bomb four or five miles away from them over on the mountain. We watched it, saw the explosion, smoke. That scared those Yaquis so bad they went back to the Yaqui River, scattered like quail.²⁴

That was apparently the last military incident of consequence in the area around Sonoita. In the 1930s a party of Agraristas, advocates of Mexican farmland socialization, invaded the Sonoita River Valley with the intent of converting the local people to their philosophy. They failed in that objective and

22. *Ibid.*, no pagination indicated.

23. Wilton E. Hoy, "Organ Pipe Cactus National Monument. Historical Research. Frontier Period" (unpublished manuscript dated October 1970 in the library of Organ Pipe Cactus National Monument), p. 160, citing *Ajo Copper News*, April 25, 1929.

24. Author's interview with Robert L. Gray, Jr., August 24, 1976, at Dowling Well and Ranch, Organ Pipe Cactus National Monument (hereafter cited as Gray Interview).

soon disappeared.²⁵ During the early 1940s army cavalry units were stationed at the monument to assist the Immigration Service in patrolling the boundary for expelled Japanese aliens.²⁶ But with the exception of occasional minor disturbances and incidents of contraband and illegal immigration, the border area around Sonoita and south of the national monument has remained remarkably quiet since the 1920s.

25. Hoy, "Early Period," p. 68.

26. *Southwestern Monuments Monthly Report*, January 1942, p. 20; February 1942, p. 21.



CHAPTER VI: MINING AND RANCHING

A. Detrimental Economies

Two industries, mining and ranching, have dominated the economy of southwestern Arizona around Organ Pipe Cactus National Monument. Both have proven lucrative, to an extent, for those private individuals and companies who practice them. Signs of these industries intrude many places within the park. Special legislation including provisions for private grazing interests on monument property dates from the 1930s, when Organ Pipe was established; provisions for prospecting within the monument date from the 1940s, when supposed wartime needs dictated a reversal of mineral exploitation policy there amenable to Arizona mining advocates. Overgrazing and unregulated prospecting on monument property have resulted, and the prolongation of such unrestricted expedients has produced continued deterioration of the area's scenic and historical value.

B. Mining

1. Early Mining in Arizona

The mining of gold, silver, copper, and other metals has sustained the economy of Arizona since before the Civil War. From 1858 to 1877 gold production dominated that of all others. Between 1878 and 1887 silver production was supreme, and after that, copper.¹ Yet even before American ascendancy occurred, the Arizona mines yielded an abundance of mineral wealth. Both Spain and Mexico retrieved profitable metal commodities until Indian depredations early in the nineteenth century brought a halt to mining activities. The country then went largely untouched until after the Mexican War and the Gadsden Purchase.²

Final determination of the boundary between the United States and Mexico and the subsequent occupation of parts of Arizona by U.S. Army troops encouraged some prospecting by American citizens, especially in the area of the Santa Cruz Valley northeast of Organ Pipe Cactus National Monument. The outbreak of the Civil War suspended these operations because the withdrawal of troops from Arizona presaged a renewal of hostilities with the Apaches. After the war, however, when soldiers reoccupied the land, a resurgence of mining interest began. Furthermore, the development of transportation in the territory, particularly of railroads, gave added impetus to mining promoters. Thereafter the

1. Arizona Bureau of Mines Staff, *The Mineral Industries of Arizona: A Brief History of the Development of Arizona's Mineral Resources*, The Arizona Bureau of Mines Bulletin 169 (Tucson: University of Arizona Press, 1962), p. 6.

2. *Ibid.*, pp. 4-5.

industry thrived on a large scale, furnishing the basis for Arizona's economy ever since.³

2. Development at Ajo

Of all the potential mineral regions in Arizona, that encompassing the present national monument was one of the slowest to develop. Early interest was directed north of the immediate monument area towards the ancient mines of Ajo, where for centuries Indians had gotten the bright red clay to paint their faces and bodies.⁴ Later, the gold placer deposits at Ajo aroused the interest of the Spanish and Mexicans before they were run out of the region by Apaches. When the Mexicans returned years later they found that the Papagos had stripped the gold placer deposits clean, so they began to extract the copper ore. They packed it by mule to El Monte, a hand blast furnace erected in the Ajo Mountains, perhaps in Alamo Canyon, within the national monument grounds. The matte was then carried south to Altar and sold. Eventually a new smelter was built in Caborca. This necessitated the establishment of a direct trail from Ajo to Sonoita then on to Caborca, a road that cut through what is now monument land. Years later the mining operation again stalled, possibly because of renewed threats by the Indians. In any event, the Mexican enterprise at Ajo seems to have been abandoned.⁵

The first American party to view the mines at Ajo came into the desert country below the Gila in 1847. Thomas Childs was one of a group originally bound for Altar, Sonora. At Sonoita the men encountered hostility engendered by the war then raging between the United States and Mexico. They decided to turn north, and in the course of their journey they came upon the Ajo mines.⁶ It was not until the 1850s, however, that the area attracted American attention, and that after more precise knowledge of the country was gained by the railroad and boundary surveys. A. B. Gray in 1854 noted the presence of "copper mines" around Sonoita as his expedition examined the terrain for a suitable railroad route.⁷ "These mines," he wrote, "are unquestionably of great value, and must become important, more particularly from their being situated in the neighborhood of the contemplated railway."⁸ The next year, as the Emory survey team

3. *Ibid.*, pp. 5-6. A handy guidebook to Arizona's economy, notably mining, during the 1880s is Patrick Hamilton, *The Resources of Arizona* (San Francisco: A. L. Bancroft and Company, Publishers, 1884). Significantly, it contains nothing of substance on the area around the national monument.

4. The Papago Indian name for the place was *au'auho*, for "paint." Hoy, "Early Period," p. 128a.

5. Dan Rose, *The Ancient Mines of Ajo* (Ajo, Arizona, 1936), pp. 12-13.

6. *Ibid.*, p. 15; Hoy, "Early Period," p. 129.

7. *A. B. Gray Report*, p. 85.

8. *Ibid.*, p. 90.

worked to establish the international line after the Gadsden Purchase, it noted some American development of the Ajo mines. Observed Lieutenant Michler:

North of Sonoita, and about forty miles distant, is a rugged serrated range of mountains called 'Sierra del Ajo,' represented to be rich in copper, gold and silver. A company was engaged in attempts at mining, but, from the scarcity of water, with little hopes of success. The great distance necessary to transport the ore on pack-mules before reaching navigation, will render their efforts futile and unprofitable.⁹

The "company" that Lieutenant Michler mentioned was probably the Arizona Copper Mining and Trading Company, which had recently been incorporated in California. Businessman Charles D. Poston founded the concern and Edward E. Dunbar became superintendent of the Ajo development. Even before the Gadsden Purchase had been finalized, Poston's operatives were on the scene at the Ajo site. Dunbar led a party of twenty men over El Camino del Diablo to Sonoita and from there they were guided north to the mines. Initially conflict occurred with the Mexican authorities over the legality of the Americans' claims, but the matter was shortly resolved with conclusion of the Gadsden agreement. The Arizona Copper Mining and Trading Company eventually hauled ten tons of copper ore to Yuma and shipped it by freighter to Wales for processing. While the company realized some profits, the inaccessibility of its mines and the general paucity of water on the road to Yuma soon proved its undoing, forcing a suspension of operations at Ajo in 1856.¹⁰ By 1857 ex-Superintendent Dunbar was running his trading establishment near Sonoita at a place presently called Dowling Well, now within Organ Pipe Cactus National Monument.

3. Revival of the Ajo Mines

Over two decades passed before the Ajo mines opened again, and the renewed activity there coincided with the imminent construction of the Southern Pacific Railroad through the nearby Gila River Valley. In 1878 a Boston firm took charge of the site. Less than a year later over one hundred prospectors were ranging through the lands near Ajo, some no doubt exploring the country to the south.¹¹ Part of the activity was due to the promotional columns of the *Arizona*

9. "Lieutenant Michler's Report," in *United States and Mexican Boundary Survey*, 1:123.

10. Hoy, "Early Period," pp. 127-31; Eldred D. Wilson, comp., *History of Mining in Pima County, Arizona* (Tucson: Arizona Bureau of Mines, 1943), pp. 6-7; William P. Blake, *Sketch of the Pima County, Arizona; Its Mining Districts, Minerals, Climate, Agriculture and Other Resources* (Tucson: Citizen Print, 1910), p. 14; Lockwood, *Pioneer Days in Arizona*, pp. 193-94; Richard J. Hinton, *The Hand-Book to Arizona: Its Resources, History, Towns, Mines, Ruins and Scenery* (San Francisco and New York: Payot, Upham and Company, and American News Company, 1878; reprint ed., Tucson: Arizona Silhouettes, 1954), p. 123.

11. Hoy, "Early Period," p. 140.

Sentinel of Yuma, which constantly touted the Ajo area and the land further south as being open for settlement. In the past, said the paper, "copper has commanded a price too low to give value to its ores at such distance from market and cheap transportation. This difficulty is now removed by the railroad. . . ."12

But the desired revival at Ajo did not occur, at least on the scale that its promoters had anticipated, until after the turn of the century when some ambitious entrepreneurs organized the Cornelia Copper Company. The biggest development came in 1916 with establishment of the New Cornelia Mining Company. This event signalled the start of the major economic growth of southwestern Arizona. Mining at Ajo stimulated other industry, notably cattle raising. Ranching grew as an important subsidiary to mining in the vicinity of Ajo after the New Cornelia began intensive development there.¹³ In 1931, following a company merger, the Ajo mines became the New Cornelia branch of the Phelps Dodge Corporation. It continues as such today.¹⁴

4. Mining Districts Below Ajo

South of the Ajo mines several mining districts were located, three of them on land now within the monument. The Quitobaquito Mining District is in the area of the Quitobaquito Springs and the Quitobaquito Hills. Production from this district appears to have been negligible.¹⁵ In the south-central part of the monument lands is the Montezuma Mining District, covering the low Sonoita and Puerto Blanco Mountain ranges. It is probably the oldest area of mineral interest within the monument, incorporating the prospects of early Mexicans who lived in that region. Today it harbors several extant examples of localized mining efforts dating from the late nineteenth and early twentieth centuries. Activity in the Montezuma District has been sporadic, with primary development occurring there between 1915 and 1918 and in 1953-54. Mineral exploration in the district has continued intermittently to the present.¹⁶

The most intensively worked mining area within the park is the Growler Mining District, which lies near the northern monument boundary in the area of Growler Pass. Named for John Growler, an early prospector there, the district

12. *Arizona Sentinel*, February 8, 1879.

13. Hoy, "Early Period," p. 141c; Cook, "Documentation of the Arizona Papageria," p. 294.

14. Hoy, "Early Period," p. 1416; Hoy, "Frontier Period," p. 164. A detailed account of Ajo's history is in Hoy, "Early Period," pp. 127-55.

15. Stanton B. Keith, *Index of Mining Properties in Pima County, Arizona*, The Arizona Bureau of Mines Bulletin 189 (Tucson: University of Arizona Press, 1974), p. 41.

16. *Ibid.*, pp. 32-33. The Montezuma District has produced approximately 1,300 tons of ore containing copper, silver, gold, and lead, with a total value of over \$200,000. *Ibid.*, p. 33. Mining has been permitted within the national monument on Congressional authority. See Chapter VIII.

includes the adjacent Growler and Bates Mountain ranges. Nearby Bates Well provided water for the district and in the early 1900s a small community existed in the pass. Despite the fact that the Growler District contained more mining claims than either Montezuma or Quitobaquito, its production has remained minimal. Only one of its mines, the Growler, had yielded a significant amount of metal-bearing ore.¹⁷ Three more districts border the area of the monument: to the north is the Ajo District, which includes the Ajo mines; to the east, on the Papago Reservation, is the Meyers, or Gunsight, Mining District, an important producer; and to the west is the small copper-producing Agua Dulce Mining District.¹⁸ The possibility of finding gold drew many early-day prospectors into the area now included in the national monument. Most of these lands lack any minerals whatever; those that appeared to the first prospectors showed in granite outcroppings found in the Growler, Puerto Blanco, and Sonoita ranges. Most of the country is composed of gravel, sand, and, in some places, silt; any wealth would have to be found in the mountainous terrain of the southwestern, northeastern, and northwestern parts of the monument.¹⁹ The most active development of these districts awaited completion in 1916 of the Tucson, Cornelia, and Gila Bend Railroad running between Ajo and Gila Bend. Creation of this spur allowed for easier transport of ore brought to Ajo to the smelter at Douglas, Arizona.²⁰

5. The Mines of Santo Domingo

Probably the first American reference to mineral wealth existing in the immediate Organ Pipe area was the statement of Andrew Gray who passed through Sonoita in 1854:

The Indians represented rich Placers existing throughout this region, and large numbers of them have lately come in with considerable quantities of the dust. They were trading it off for trifles to the Mexicans. I got some specimens of it which was the same as the California gold. This was not the time of year (June) for them to work the mines, but in the fall, after the rain has commenced. The greatest drawback to the profitable

17. *Ibid.*, pp. 27-28.

18. Eldred D. Wilson, Robert T. O'Haire, and Fred J. McCrory, "Map and Index of Arizona Mining Districts" (Tucson: Arizona Bureau of Mines, 1961). See also Blake, *Sketch of Pima County*, pp. 12-21, for information on all these districts ca. 1910.

19. B. S. Butler and J. Volney Lewis, "Mineralization in the Organ Pipe Cactus National Monument, Arizona" (unpublished manuscript dated 1940 in the library of Organ Pipe Cactus National Monument), pp. 26, 32.

20. David F. Myrick, *Railroads of Arizona. Vol. I. The Southern Roads* (Berkeley: Howell-North Books, 1975), pp. 400-401.

working of the Placers of this district, is the scarcity of water.²¹

Quite possibly Gray's remark referred to the San Antonio Mine, about thirty-five miles south of Sonoita in Mexico, which contained an abundance of gold-bearing quartz. Besides gold ore, the region harbored substantial quantities of silver; by the 1870s the so-called Santo Domingo mines were legendary. These deposits were said to be "10 to 15 miles from Quitobaquito and only a few miles away from Sonoita and inside the U.S. boundary,"²² making their likely location inside the present monument and probably in the Sonoita Mountains. Evidence of much past mining activity exists there.²³ Furthermore, it appears that the "Santo Domingo Mining District" was synonymous with what became known as the Montezuma District. The *Arizona Sentinel*, in March 1879, noted that "the Santo Domingo silver mines have long been worked by men too poor to properly develop them. But an Eastern company has already been formed, with means enough to handle them."²⁴ A lengthy description of the lucrative property revealed that

Much attention is at this time being attracted to the Santo Domingo Mining District, and the mines belonging to Messrs. [Ariano] Smith & [Samuel] Purdy are truly developing into very valuable property. These gentlemen own several claims in the District, and have spent much time, labor and capital in opening and prospecting them. The El Monte, Guadalupe and Fresh Start mines have been worked to a greater extent than the others, and at a depth of 110 feet--the bottom of the deepest shaft--the showing is first class, warranting the investment of any amount of capital. Smith & Purdy also own a mill-site [at Quitobaquito?] which, from the nature of things, has a great and lasting value, covering, as it does, all the available water on the American side of the boundary line, and being very accessible from the mines. The principal mines of the District are about nine miles north of the boundary line and some forty miles south of the famous Ajo mine. Rarely [located] rich lodes are found on both sides of and close to the line, and the same mill-site has sufficient water for them all. Mexico imposed no duties on the exportation of ore, and that started from the lodes on the Sonora side of the line could be hauled to and reduced at the mill-site on the American side, thus saving the heavy tax levied by Mexico upon the exploration of precious metals.

21. A. B. Gray Report, p. 87.

22. *Arizona Sentinel*, March 15, 1879; Hoy, "Early Period," p. 31, quoting *Arizona Sentinel* for September 1898.

23. Hoy, "Early Period," p. 32.

24. March 15, 1879.

The *Sentinel* remarked that the Mexican port of Libertad lay only sixty miles away from the mines. "We look to see an enterprise of much magnitude some day based upon the mines of Santo Domingo District, and the peculiar facilities afforded by the surrounding country for the carrying out of a large scheme."²⁵

6. Interests of Ortega and Levy

Possibly the mines of Santo Domingo included the Lost Cabin, Baker, Milton, La Americana or Victoria, and Martinez sites now located within the national monument. In the 1890s Cipriano Ortega operated some of these, notably La Americana, and claimed to have extracted \$14,000 worth of ore with an investment of less than \$100.²⁶ Ortega crushed the ore at his Santo Domingo hacienda. In 1900 he operated six steam-powered arrastras manufactured in Brooklyn and evidently purchased by Mikul G. Levy who ran the store at Santo Domingo.²⁷ Levy himself had mining interests in the region and at various times kept stores at La Americana Mine, at Sonoita, and at San Antonio, Sonora. After fire consumed his business at San Antonio, Levy moved to Dowling Well, within the monument lands. He later ran a store at Ajo, but it, too, burned.²⁸ Yet another miner in the immediate area was the Irishman Patrick T. Dowling, who sometime in the late nineteenth century located a claim south of the border near Sonoita but operated a mill at the site of Dunbar's old store, then called Dowling Well.²⁹

7. Other Mines

Even as the Santo Domingo mines were being developed, so were claims elsewhere. The Meyers, or Gunsight, Mining District, just east of the monument grounds, was founded by R. H. Meyers, C. D. Marshall, C. L. Ward, and B. H. Lockhart early in 1879. Mines within the district were named Gunsight, Silver Girth, Atlanta, Eastern, Westward, Monumental, Morning Star, Crescent, and Mineral Bed. By March 1879 the *Sentinel* reported "over 100 men . . . prospecting in that vicinity. . . . The Papago Indians are friendly, and sell beef to prospectors at very reasonable prices."³⁰ The Gunsight Mine proved to be the principal lode in the Meyers District, its silver production peaking in the

25. December 14, 1878. See also mention of the Santo Domingo mines in the *Arizona Sentinel*, April 20, 1878, and October 19, 1878.

26. Hoy, "Early Period," p. 32, citing *Arizona Sentinel* for September 1898.

27. Hoy, "Early Period," p. 33.

28. Hoy, "Frontier Period," no pagination indicated; Haley, *Jeff Milton*, p. 388.

29. Haley, *Jeff Milton*, p. 190; Lynn T. Irish, comp., "Place Names of Organ Pipe Cactus National Monument" (unpublished, undated manuscript in the library of Organ Pipe Cactus National Monument), n.p.

30. March 15, 1879.

1880s. Its output waned into the 1960s,³¹ and its total silver production has been estimated at \$100,000.³² In the northern section of the monument a large number of claims were located in the Growler District in the 1880s and 1890s. Activity there peaked in the years between 1900 and 1920, with more than 100 mining claims filed during that interval.³³ One of the most profitable developments was that of the Growler Copper Company, which in 1910 controlled the Copper Hill Group of twenty-eight claims covering 500 patented acres. Other controlling interests have been the Boston Gold-Copper Company, the Colonial Copper Company, and Bell, Long, Ferrell and Gow. The Growler District's cumulative production by 1973 lay in the range of \$1,000,000.³⁴

C. Ranching

1. Growth of the Cattle Industry

The cattle industry in Arizona can be said to have started with the introduction of beeves by the Coronado expedition of 1540. These animals escaped and multiplied in the wild, but there was no organized effort to cultivate their breeding by Indians in the region. That was left to the Jesuit missionaries nearly 150 years later. In 1699 Father Eusebio Francisco Kino established a cattle ranch at the Indian village of Sonoita to support his contemplated Mission San Marcelo del Sonoydag. And in 1775-76, when the De Anza expedition passed along the Gila River towards California, some cattle became lost from the column.³⁵ These various animals formed the nucleus for the later cattle industry in southern Arizona. Additional cattle entered the region with the gold-seeking emigrants of 1849 and after, and in 1854 an ambitious attempt to introduce cattle in the Yuma Valley failed when the animals were lost to raiding Indians.³⁶ Some of the stock that came into the Arizona Country was crossbred

31. Keith, *Index of Mining Properties*, p. 29. In the early 1930s the Black Bess Consolidated Gold Mining Company opened the Black Bess Mine within the Meyers District and only about one mile east of Walls Well, close to the eastern boundary of the national monument. *The Mining Journal*, September 15, 1931.

32. Butler and Lewis, "Mineralization in the Organ Pipe Cactus National Monument," p. 30.

33. "Index to Mining Record. Name of Mine," vols. 4-8. Office of the Pima County Recorder, Pima County Courthouse, Tucson, Arizona.

34. Blake, *Sketch of Pima County*, p. 21; Keith, *Index of Mining Properties*, pp. 52, 87, 121; Charles A. Mardirosian, comp., "Mining Districts and Mineral Deposits of Arizona (Exclusive of Oil and Gas)" (published by the author, 1973). Map Collection, University of Arizona Library, Tucson.

35. Hoy, "Frontier Period," p. 199.

36. *Ibid.*, pp. 199-200.

with Brahamas, a particularly hardy breed that was introduced into the United States in 1849 and whose characteristics included a natural toleration of heat and an immunity to disease and insects.³⁷

The assertion of American control over the region following the Mexican War encouraged the growth of cattle ranching in southern Arizona. The presence of United States soldiers offered some protection and stability in the Apache country, and within a few years settlement grew along the Sonoita Valley near the Huachuca and Patagonia mountains, far east of the present monument lands. Other ranches developed along the Santa Cruz Valley and in the vicinity of Tucson.³⁸ Many of the cattle to stock these ranches came from Sonora. In the early 1860s Thomas Childs acquired 200 head for his ranch at Ajo.³⁹ But these years represented no boom period for Arizona cattlemen, and with the coming of the Civil War and the withdrawal east of the army garrisons, the incipient industry succumbed to renewed attacks by Indians and Mexican outlaws.⁴⁰

2. Legal and Technological Incentives

Not until the 1870s and the partial quelling of Indian disturbances did cattle ranching recommence in Arizona, and the advancement owed much to federal incentive. Favorable legislation had emerged from Congress in the form of the 1860 Homestead Act, which allowed a farmer to acquire, virtually free, 160 acres of the public domain. In 1877 the Desert Land Act enabled ranchers to take 640 acres, contingent upon its irrigation and a small payment of \$1.25 per acre. Land acquisition under the Desert Land Act was limited to 320 acres after 1890.⁴¹ Most of the ranching in the 1870s and 1880s was concentrated in the grassy valleys around Tucson and southeast of there. Improvements in cattle breeding accelerated occupation of the desert region further west, and in 1883 the first Herefords in Arizona were introduced on a ranch east of Nogales. They proved to be especially well suited to the hot, arid climate along the border, and although cattlemen raised other breeds such as Durhams and Shorthorns, the Herefords became the favorite of them all.⁴² In 1916 Congress restored the previously-dropped 640-acre rangeland limit in the Grazing Homestead Act, providing still further incentive for cattlemen in the particularly arid border regions. Then, in 1934, the Taylor Grazing Act was passed. This edict called for the orderly use of grazing lands to prevent overgrazing and injury to the land. It established for the first time controlled grazing districts to stop the previous unregulated use of public property. Furthermore, the act called for partial

37. *Ibid.*, p. 201.

38. Wagoner, *Cattle Industry*, p. 32.

39. *Ibid.*; Hoy, "Frontier Period," p. 200.

40. Hoy, "Frontier Period," p. 200.

41. Wagoner, *Cattle Industry*, p. 63.

42. Lockwood, *Pioneer Days in Arizona*, p. 235; Hoy, "Frontier Period," p. 201.

return of federal grazing fees to the states to benefit those counties in which the grazing lands were located. Overall, the Taylor Grazing Act stimulated and stabilized the cattle ranching industry by economically regulated use of available lands.⁴³

3. Ranching the Organ Pipe Country

No major cattle production by Americans in the immediate vicinity of the national monument took place until after 1912, and earlier references to cattle and horses in the Sonoita Valley largely referred to stockraising south of the international line.⁴⁴ Papago Indians, of course, kept some livestock at Quito-baquito.⁴⁵ One of the first Americans to come into the area to ranch was Ronald Blankenship, who arrived sometime around 1915. Blankenship consolidated the water rights to existing wells, springs, and tanks in the region, and in 1917 he dug a well and built a tiny adobe house about five miles northeast of Sonoita and a few hundred yards above the border. This structure was soon destroyed by a flash flood. Blankenship fairly typified the early-day rancher. He carried a revolver at his side and reportedly did not hesitate to use it. Little is known about him prior to his arrival in the Sonoita Valley; scarcely more is known about his presence and cattle operation there. Kirk Bryan visited Blankenship's ranch and analyzed his well during his desert water survey in 1917. Two years later Blankenship had sold out and left.⁴⁶

4. The Gray Eminence

Blankenship was not the sole rancher to run cattle on land now within the monument. In fact, in 1918 his cattle numbered only about 100 head, far fewer than the holdings of others in the area. William G. Miller had 600 cattle grazing the country just southwest of Walls Well, and around Bates Well Reuben Daniels maintained 800 head more.⁴⁷ But the preeminent cattle ranching era in the region came with the arrival of Robert Louis Gray, Sr., who in 1919 purchased all of Blankenship's holdings along the border. Born in Arkansas around 1875, Gray migrated to Texas as a young man and began working with cattle. He married

43. Wagoner, *Cattle Industry*, pp. 68, 69, 70; Hoy, "Frontier Period," p. 204.

44. Appleman and Jones, *Blankenship Ranch*, p. 9. With regard to the Sonoita Valley, the *Arizona Sentinel*, February 8, 1879, reported that "Small herds of cattle and horses are . . . fattening upon the grasses of this part of our country."

45. Appleman and Jones, *Blankenship Ranch*, p. 9.

46. *Ibid.*, pp. 16-17, 20-21, 23, 24, 27-28. For the most complete information about Blankenship and his property, see *ibid.*

47. E. C. LaRue, "The Live Stock Industry and Grazing Conditions in Arizona" (unpublished U.S. Geological Survey report dated 1918 in the Arizona State Library, Phoenix), Exhibit II, "Map--Pima & Santa Cruz Counties--Deeded & leased Lands."

there, and in 1912 he and his family moved to south of Benson, Arizona, in Cochise County, where they ranched until Gray acquired the Blankenship property. Physically small, Gray was a personable, gregarious fellow and an astute businessman. He managed the property well. One of his sons recalled that "he wasn't afraid of nobody. He didn't pick no fights. He'd go down to Sonoita and shoot the damn saloon up."⁴⁸ Gray fathered five sons and three daughters who lived at one time or another on the monument land. Another child apparently died in infancy.⁴⁹ Four of the sons--Henry, Jack, Ralph, and Robert Louis, Jr., (Bobby)--eventually became partners with their father in the ranch operations, although in the 1940s Ralph sold his interest to Bobby Gray and moved to California.⁵⁰

Robert, Sr., took immediate charge of his property in 1920. Disliking the name "Rattlesnake Ranch" that Blankenship had given it, he renamed it "Dos Lomitas" after two small hills located close by. Soon after his arrival he built a new ranch house of adobe. Blankenship had increased his cattle to around 300 head by the time Gray took over; to these Gray added 500 head of his own.⁵¹ He also brought horses. Reported Bobby Gray:

There was just enough horses to drive the cattle down here from Ajo. The big herd of horses, we brought them in in two bunches. Brother Abe brought one bunch by himself. All the way from Benson. Abe got lost following directions of Indians and got the horses into Mexico. Finally got them back to the Blankenship. . . . [We had] not too many horses, just enough to take care of the cattle--not several hundred head.⁵²

The Gray ranch extended its acreage in the 1920s and 1930s. Gray's cattle ranged all over the monument, even west to Quitobaquito, and occasionally the men had to round up their stock across the unfenced boundary into Mexico. In the mid-1920s Henry, the oldest son, moved into a house in Alamo Canyon. Later, after 1935 when Robert, Sr., acquired the watering rights to Bates Well and Daniel's Well, Henry moved to Bates Well where he remained. Jack Gray eventually occupied the residence in Alamo Canyon, and Bobby Gray in the early 1940s settled at Dowling Well, later filing for a homestead there.⁵³ While the Gray

48. Gray Interview.

49. *Ibid.*; Appleman and Jones, *Blankenship Ranch*, p. 26. Gray's wife was named Sara. The children, ranked according to their age, were sons Henry, Abe, Ralph, Jack, and Robert Louis, Jr., and daughters Lee, Mary, and Billie. *Ibid.*, p. 28.

50. Appleman and Jones, *Blankenship Ranch*, p. 28; Gray Interview.

51. Appleman and Jones, *Blankenship Ranch*, p. 27.

52. Gray Interview, p. 4.

53. *Ibid.*; Appleman and Jones, *Blankenship Ranch*, p. 25; Hoy, "Frontier Period," no pagination indicated.

partnership has succeeded, its success had been marked by legal difficulties since creation of the Organ Pipe Cactus National Monument on property comprising the family's heretofore unrestricted grazing land. And although the Grays were allowed to continue using the land for their cattle, the issue has become entangled in legalities stemming from the original agreement with the Department of the Interior.⁵⁴

Robert Louis Gray, Sr., died in 1962. His sons Henry, Jack, and Bobby continued the Gray partnership. Throughout the early 1960s the business realized annual returns of about \$40,000, and in 1969 the Grays sold 777 head of cattle for about \$100 each, realizing approximately \$77,700, which was exceptional.⁵⁵ Then, in 1975, Jack Gray died. The deaths of his brothers Henry and Bobby in September and December 1976, respectively, ended an association that had spanned nearly six decades. The passing of the Grays marked the close of an important and colorful era in the history of Organ Pipe Cactus National Monument and, indeed, of southwestern Arizona.

54. Discussed in Chapter VII.

55. Appleman and Jones, *Blankenship Ranch*, pp. 30-31.

CHAPTER VII: NATIONAL PARK SERVICE ADMINISTRATION

The area now encompassed by Organ Pipe Cactus National Monument belonged for a long time to the public domain. Creation of the monument came in 1937, over eight decades after the United States' acquisition of the land from Mexico under terms of the Gadsden Treaty. Contrasted with the oft-stormy formative periods preceding the establishment of many national parks and monuments, that concerning Organ Pipe Cactus was calm, deliberative, and only mildly controversial. The period of debate arose later.

A. Early Legislation Affecting the Land

Active interest by the national government in the immediate area of the monument dates from late in the nineteenth century and the establishment of U.S. customs and immigration stations near Sonoita. Federal withdrawal of land from the public domain began in 1907. In that year President Theodore Roosevelt proclaimed for use by customs personnel a strip of land sixty feet wide running adjacent to the American side of the international boundary.¹ Roosevelt's was the only land withdrawal in the area until 1923, when President Calvin Coolidge, desirous of creating a public watering place in the desert, proclaimed forty acres of land around the Quitobaquito spring and pond as Public Water Reserve No. 88.² For a while thereafter, only customs and immigration control prompted further retractions. In October 1930 President Herbert Hoover, by executive order, announced the withdrawal of additional land for the United States Customs-Immigration Reserve. This tract included the section of the present Lukeville complex, although federal development at the site was delayed until 1940-41 when the customs station was erected.³

1. Wilton E. Hoy, "Organ Pipe Cactus National Monument. Historical Research. Administrative" (unpublished manuscript dated October 1970 in the library of Organ Pipe Cactus National Monument), p. 1. Roosevelt's proclamation is reproduced in John H. Davis, "Organ Pipe Cactus National Monument: A Study of Conservation Objectives Relating to its Establishment, Boundary Adjustments and Private Interest in the Area" (unpublished manuscript dated November 1957 in the library of Organ Pipe Cactus National Monument), B-5. Copies of much of the legislation discussed in this chapter are in Edmund B. Rogers, comp., *History of Legislation Relating to The National Park System Through the 82d Congress*, Volume, "Organ Pipe Cactus National Monument" (Washington: National Park Service, 1958).

2. Hoy, "Administrative," p. 3; Davis, "Organ Pipe Cactus," B-4.

3. Hoy, "Administrative," p. 173; Davis, "Organ Pipe Cactus," B-3; Bureau of Land Management survey map. Township 18 South, Range 5 West, Gila and Salt River Meridian, Arizona. Supplemental Plat, August 25, 1933. Bureau of Land Management, Phoenix, Arizona.

B. Beginning of Lukeville

Development of commercial Lukeville began in the late 1930s when Herbert J. Kilpatrick, who had earlier patented about sixty-nine acres joining the government holdings there, sold out to Charles S. Luke, a Phoenix store manager. Luke informally named the site either after himself or his brother, World War I flying ace Frank Luke, Jr., who had been killed in action in 1917. Charles Luke and others with lesser interests cooperated smoothly with the county and federal governments in providing access to the customs property, and in 1949, with establishment of a post office, the community was officially designated Lukeville.⁴ The private holdings at Lukeville have since changed hands and commercial developers have sought to encourage tourism there. Efforts to legally change the name of the border community to Organ Pipe City or Gringo Pass have thus far not succeeded. Today, besides the post office, Lukeville boasts a motel, trailer park, supermarket, laundromat, cafe, bar, and gas station.⁵

C. Creating Organ Pipe Cactus National Monument

Certainly the presence of Organ Pipe Cactus National Monument has promoted the commercial livelihood of Lukeville. The creation of the monument marked the biggest withdrawal from Arizona's public domain and precipitated opposition from some representatives of the state's paramount economic interests--mining and ranching. The idea for Organ Pipe Cactus National Monument was conceived in a 1931 memorandum prepared by E. D. McKee, Park Naturalist at Grand Canyon National Park, for Superintendent M. R. Tillotson. The border country of the Sonoita-Lukeville area was one of five sites proposed by McKee as possessing sufficient scientific and natural interest to qualify for national monument status. Arizona Democratic Congresswoman Isabella S. Greenway and former Postmaster General Frank H. Hitchcock, along with the University of Arizona and the Tucson Natural History Society, encouraged the proposal, and in February 1932, McKee's ideas were implemented. Superintendent Roger W. Toll of Yellowstone National Park, Wyoming, was sent to the Southwest to reconnoiter the area and to determine the feasibility of the projected national monuments. In less than a month Toll recommended to National Park Service Director Horace M. Albright that two be established: Saguaro National Monument and Organ Pipe Cactus National Monument.⁶ Yet five more years passed before the latter became a reality; during the interim the monument boundaries were definitely established and attempts were made to allay the fears of miners and cattlemen who considered the design detrimental to their interests. Only after the boundaries of the proposed monument were firmly

4. Hoy, "Administrative," pp. 166, 167; Irish, "Place Names of Organ Pipe Cactus National Monument."

5. Hoy, "Administrative," p. 169. For more details of the development of Lukeville, see *ibid.*, *passim*.

6. Eden, "History of Organ Pipe Cactus National Monument," p. 12; Davis, "Organ Pipe Cactus," p. 1. Maps showing the widely varying land areas included in Toll's recommendations for Organ Pipe Cactus National Monument are appended to *ibid.*

established did formalization officially occur. Acting Secretary of the Interior Charles Franklin West petitioned the President for withdrawal of the property and creation of the national monument. Franklin D. Roosevelt signed the proclamation on April 13, 1937, and Organ Pipe Cactus National Monument was established.⁷ Significantly, the park lands were set aside because they contained "various objects of historic and scientific interest. . . ."⁸

D. An Era of Discord

The creation of the monument, besides producing some discord among residents of the Ajo Valley concerned over the extent of acreage in the withdrawn parcel, provoked the ire of economic interests most intimately connected with the land. In the end, both ranchers and miners, through sustained political pressure, were able to win significant concessions that allowed for the continuation of grazing and mining privileges within the monument proper, despite the environmental hazards their prolongation entailed. In effect, the conservation objectives of the initiating legislation were thereby stymied almost from the beginning and the monument fell victim to the economical and political dictates of the cattlemen and the mining interests.

1. Mollifying the Grays--The Grazing Privilege Controversy

The Robert Louis Gray family constituted the chief problem for the National Park Service in regard to cattle grazing on the monument grounds. The Grays had ranched in the Organ Pipe area for over seventeen years by the time the monument was established, and they naturally viewed the new federal status as a threat to their livelihood. Five months after the proclamation creating the monument, Robert Louis Gray took action to insure his grazing rights. Gray protested the withdrawal, through Ajo attorney Alton C. Netherlin, to Arizona's Democratic United States Senator Carl Hayden. In 1939 Hayden arranged for Gray to receive a permit to graze his cattle on the monument property. Under terms of the agreement, subsequently renewed, Gray could maintain 550 head of cattle, 25 bulls, and 9 horses in return for a minimal fee of \$10.00 per year.⁹

These conditions lasted for three years. During the interim the Grays commissioned Phoenix attorney Elmer C. Coker to represent them in seeking further concessions from the Government. In 1942 Henry Gray won the right to graze 500

7. Eden, "History of Organ Pipe Cactus National Monument," p. 17; A detailed treatment of the establishment appears in Davis, "Organ Pipe Cactus," pp. 1-5.

8. Thomas A. Sullivan, comp., *Proclamations and Orders Relating to the National Park Service Up to January 1, 1945* (Washington: Government Printing Office, 1947), p. 262. The full text of the proclamation is reproduced in Appendix A.

9. Hoy, "Administrative," p. 57; Cook, "Documentation of the Arizona Papagueria," p. 302. Hayden and others circulated a petition in behalf of the local interests, requesting that the monument be moved further west. Hoy, "Administrative," p. 57.

additional cattle on the park land, or a total 1,050 head. This agreement, however, stipulated that after 1943, in addition to the \$10.00 annual grazing fee for the originally specified 550 animals, the Grays must annually pay sixty cents per head beyond that number.¹⁰ In order to insure continuance of the grazing privilege, Attorney Coker pressed Senator Hayden to get from the National Park Service a lifetime permit for the Grays to range cattle on the monument. To this end, Hayden obtained from Acting Park Service Director A. E. Demeray precisely these assurances:

It is our intention to continue to issue permits on an annual basis, during the lifetime of the Grays, or their survivors, so long as they do not dispose of their ranch interests by sale or, in the event of death of any of them, by will or the intestate laws of the State to other than the survivor or survivors of them.¹¹

Presumably this decision applied only to the Gray partnership and did not include other members of the Gray family. In ensuing years this statement fostered considerable controversy over its specific meaning.

Extension of the grazing right from Robert Louis Gray alone to his partner sons--Henry, Jack, and Bobby--occurred in 1949.¹² The grazing fee for the additional 500 cattle doubled in 1957 and thereafter the Grays paid \$610 per year to maintain their herds on monument property.¹³ Then in 1966, four years after Robert Louis, Sr.'s, death, the operation received a major setback with an announcement by Secretary of the Interior Stewart Udall that the Grays must cut their livestock back to the 1939 number of 550 head.¹⁴ Udall's decision, made in the interests of conservation and land management, did not settle well with the Grays. Their relationship with the National Park Service, already tenuous, deteriorated even further. By 1968 the Department of the Interior had decided that continued grazing on the monument was detrimental to the environment and accordingly instructed the National Park Service to terminate the Gray family's permit. Growing ecological concern in the late sixties sounded the knell on the Grays' cattle business and produced an embarrassing situation for their champions in Congress who had done so much to protect them. Senator Hayden immediately

10. Hoy, "Administrative," pp. 60, 63; Cook, "Documentation of the Arizona Papaguera," p. 303.

11. Quoted in Hoy, "Administrative," p. 61. See Also Cook, "Documentation of the Arizona Papaguera," p. 303.

12. Hoy, "Administrative," p. 60.

13. Cook, "Documentation of the Arizona Papaguera," p. 303.

14. Hoy, "Administrative," p. 86. All pertinent correspondence (including permits) relative to the Gray partnership's grazing rights within the monument into the 1950s is included in Davis, "Organ Pipe Cactus," pp. 7-10, and Appendix D of that study.

introduced legislation to compensate the Grays with \$292,000 for their projected loss of range privileges.¹⁵ The Grays, meantime, and with some validity, charged the Government with renegeing on its earlier promise of a lifetime permit for the partners. In 1970 the grazing right was ended, and the termination created numerous complications, legal and otherwise, for the Grays and for the Park Service.¹⁶ Compensation for the Grays' relief never materialized and, despite cancellation of the grazing privilege, cattle continued to trample and eat the desert foliage. Time finally settled the inaction and indecision of the Government. Jack Gray died in 1975; Henry and Bobby Gray died the following year. The Gray partnership was dissolved forever.

2. Indian Grazing Rights

In addition to the problem of grazing rights for the Grays, the National Park Service, following creation of Organ Pipe Cactus National Monument, had to deal with the Papago Indians, who had ranged cattle over parts of the land for centuries. In 1939 the Commissioner of Indian Affairs asked permission to allow the Papagos to continue to graze their stock in the southeastern area of the monument below the Ajo Mountains, a traditional range for the tribesmen. The request was granted by the Park Service in 1940 on condition that drift fences be built in the passes to prevent the cattle from wandering indiscriminately into other areas of the park. The Indians paid a minimal fee for the privilege until 1959 when the fee was discontinued.¹⁷

Yet another grazing issue confronting the Park Service concerned the land around the Quitobaquito spring and pond held by Jose Juan Orosco, a Sand Papago. Commissioner of Indian Affairs John Collier requested that Orosco be allowed to stay on his fifteen-acre tract and to continue to graze 100 head of cattle in the area. The Orosco family had resided at Quitobaquito since the nineteenth century. Deferring to this request, the Park Service permitted Orosco to stay. On Juan's death in 1945 his holdings at Quitobaquito devolved to his son, Jim Orosco, who by virtue of a condemnation suit, sold his rights to the property to the National Park Service in 1957.¹⁸

15. Hoy, "Administrative," pp. 111, 112.

16. *Ibid.*, no pagination indicated.

17. *Ibid.*, p. 61; Cook, "Documentation of the Arizona Papaguera," p. 303; Davis, "Organ Pipe Cactus," pp. 11-13. See *ibid.*, D-5, D-6, D-7, for the initiating agreement between the Superintendent of the Papago Indian Agency, on behalf of the Bureau of Indian Affairs, and the Superintendent of Southwestern National Monuments, for the National Park Service, dated September 1, 1940, and the regulation ordinance approved by the Papago Council in 1939.

18. Cook, "Documentation of the Arizona Papaguera," p. 303. Correspondence relating to the Orosco grazing rights matter is in Davis, "Organ Pipe Cactus," pp. 13-14. Details of the transaction by which Jim Orosco sold his holdings to the National Park Service are presented in Hoy, "Administrative," p. 150.

3. Patrolling the Border

The presence of cattle in the national monument also produced other legal problems. Some of these concerned the construction of wells and tanks and similar appurtenances conducive to the grazing industry.¹⁹ Moreover, the existence of free-roaming herds along the international border encouraged the introduction of contagious disease into the United States from Mexico. In 1947 the fear proved real, as hoof and mouth disease spread north through Sonora to the boundary region. The border was not adequately fenced to prevent the animals from crossing the line and mingling with the American cattle within Organ Pipe Cactus National Monument. To reduce this danger, the United States Bureau of Animal Husbandry established stations at Quitobaquito and Dowling Well and undertook frequent horseback patrols along the boundary.²⁰ These efforts helped prevent an epidemic that threatened the wholesale infection of thousands of cattle in the American Southwest.

4. Action of the Mine Owners

The problem of mining, the other principal intrusive economy at Organ Pipe Cactus National Monument, has nettled Park Service officials since the area's creation. While there was little registered opposition prior to the 1937 proclamation, after the exact size of the withdrawn tract became known, complaints came loud and fast, mainly from the Arizona-based Small Mine Owners Association. Legislation creating the monument allowed for continued mining, under the Mining Law of 1872, of claims already located there, but this gave Association members small satisfaction. One of the group's chief spokesmen was Albert I. Long of Ajo, who vocalized increasing discontent because the area henceforth was closed to prospecting and to the registering of more claims.²¹ Under Long's leadership, the Small Mine Owners Association agitated for repeal of the restrictive provision. Long personally held four claims in the Growler Mining District and he carried his argument forth with vigor all the way from the Monument level through the Region to Washington, where he interested several congressmen in his project.

5. Congress Acquiesces

Long's appeals for changes in the mining clause coincided with ominous world happenings that were to culminate in the outbreak of World War II. "National necessity" provided added incentive for restoring the right to prospect on the monument lands, but the guise unleashed a storm of criticism from environmentalists in Arizona and across the nation.²² Nevertheless, in 1940 bills were introduced in both houses of Congress to restore unrestricted mining within the

19. See Hoy, "Administrative," *passim*, for detailed examples of these difficulties and the legal problems they posed for the NPS.

20. Hoy, "Early Period," p. 121; Hoy, "Administrative," p. 151a.

21. Eden, "History of Organ Pipe Cactus National Monument," p. 18.

22. Davis, "Organ Pipe Cactus," pp. 5-6; Nell Murbarger, "Treasure of the Organ Pipe," *The Magazine Tucson* (April, 1949), pp. 29, 56.

monument boundaries. Numerous conservation groups opposed the legislation, and the Gila Bend (Arizona) Lions Club protested the bill in a strongly-worded resolution to Senator Hayden suggesting that the monument be given National Park status and thereby remain closed to mining. The Park Service meantime was considering the feasibility of redesignating the monument a National Recreation Area with multiple-use potential, including mining. This provision was, in fact, included in the 1940 introduced legislation. Eventually NPS officials settled on retention of monument status for Organ Pipe and the miner-conservationist battle continued unabated.²³

The 1940 legislation failed of enactment partly because of the exhibited opposition. Senator Hayden and Representative John R. Murdock (Democrat-Arizona) nonetheless reintroduced the measure, minus the name change, next year during the 77th Congress. Hayden presented Senate Resolution 260, and Murdock presented House Resolution 2675, in January 1941. Hayden's bill passed the Senate in May. The House also passed it in lieu of Murdock's legislation the following October 15. President Roosevelt signed the measure, entitled "An Act to permit mining within the Organ Pipe Cactus National Monument in Arizona. . . ," into law on October 27, 1941.²⁴

Even as the Congressional debate ensued, preparations were underway among prospectors to begin work on the monument lands. Reported Custodian William R. Supernaugh:

Prospectors are beginning to arrive in Ajo ready to go onto the monument when the bill is signed. . . . It looks as though there would be another gold rush down here. Considerable publicity has been given to this bill and I find many who expect to prospect in the monument do not realize that the area has been mined for over 100 years without any findings of value.²⁵

After the measure had become law, Supernaugh noted much initial noncompliance among the prospectors in obtaining the required permits before starting work on monument property. Disputes occurred over conflicting claims, and "one argument . . . almost turned out to be quite a fight," remarked the custodian.²⁶

23. Eden, "History of Organ Pipe Cactus National Monument," p. 18; Hoy, "Administrative," no pagination indicated; Appleman and Jones, *Victoria Mine*, p. 1.

24. Hoy, "Administrative," no pagination indicated; Appleman and Jones, *Victoria Mine*, p. 2; Thomas A. Sullivan, comp., *Laws Relating to the National Park Service. Supplement I, July 1933 through April 1944* (Washington: Government Printing Office, 1944), p. 170. Davis, "Organ Pipe Cactus," C-2, C-3, reproduces "Regulations to Permit Mining Within the Organ Pipe Cactus National Monument in Arizona," approved January 20, 1942, by the General Land Office. The text of the act appears in Appendix B.

25. *Southwestern Monuments Monthly Report*, November 1941, p. 26.

26. *Ibid.*, December 1941, p. 21.

6. Mining on the Monument

Unrestricted prospecting and mining have plagued National Park Service personnel charged with protecting the monument since such development became permissible nearly four decades ago. By its existence, the law has compromised the work of the Park Service and provoked considerable confusion regarding the Service's mission at Organ Pipe Cactus. "Weekend prospectors" have poked through the mountainous terrain and have left harmful scars on the landscape with their abandoned access routes and prospect holes. One of the largest "small" strikes on the monument was that of W. G. ("Boots") Burnham who in 1948 located three gold claims along an old, heavily-worked site in the Sonoyta Mountains. Burnham found gold ore that assayed at \$251 per ton. After his death in 1961 a man named Walter J. Koller continued working the claim.²⁷

Although the enterprise of people like Burnham and Koller had complicated the work of the National Park Service, it has been the interest displayed in the area by the corporate giants of mining that has evoked the worst fears of Park Service personnel and environmentalists alike. This omnipresent threat has appeared time and again in the form of geological engineers from various concerns traversing monument land exploring for potential mineral wealth. In 1956 and 1957 the National Park Service succeeded in purchasing two small claims in the Crowler District, including those of the irrepressible Albert I. Long, whose advocacy of open mining had promoted the 1941 law. Immediately the Phelps Dodge Corporation challenged the Park Service's right to withdraw the claims as being contradictory to the 1941 act. The matter was appealed to the Associate Solicitor for Parks and Recreation in Washington who ruled, in favor of the National Park Service, that the concerned sites represented "purchased" as opposed to "public" land. The opinion constituted a major environmental victory for the monument; Phelps Dodge moved out of the claim area in 1967.²⁸ Also in 1967, another firm, the DeNiza Mining Corporation, came onto monument land and dug more than 100 large pits simply to validate its claims there under the law. While in this instance the company refilled the holes before leaving, the irreparable consequences of such an action were obvious and morally inexcusable.²⁹

7. Repeal of the Mining Law

But the environmentalists finally had their day. On September 28, 1976, Congress passed Public Law 94-429, which repealed the 1941 law, among others. At long last the new act recognized the fact that modern mining technology, together with "continued application of the mining laws of the United States to those areas of the National Park System to which it applies, conflicts with the purposes for which they were established. . . ." Henceforth, mining in National Park Service areas "should be conducted so as to prevent or minimize damage to

27. Hoy, "Administrative," p. 120.

28. *Ibid.*, p. 125.

29. *Ibid.*, p. 124.

the environment and other resource values. . . ."30 The act further provided for the temporary cessation for four years of exploration and mineral development on valid claims located in Organ Pipe Cactus National Monument that had not been worked prior to February 29, 1976.³¹ In these respects, by providing for strict regulation of mining practices, the 1976 law should significantly reduce future technological deterioration of the monument lands.

E. Other Management Problems

Yet another concern for responsible personnel at Organ Pipe Cactus National Monument has been the liquidation of private inholdings, those land parcels whose individual ownership outdated creation of the monument. Besides the Grays', one of these belonged to William G. Miller, who acquired the property near Walls Well in the early twenties and later deeded it to his wife, Birdie Del Miller. Both of the Millers had left the area by the late 1930s, but Mrs. Miller retained rights to improvements made on the property and to a mining claim located there. In 1959, following prolonged contention between Mrs. Miller and the National Park Service, she sold her tract to a private land developer who in 1970 transferred 240 acres to Organ Pipe Cactus National Monument in a land exchange transaction.³²

The Park Service encountered similar frustration when it sought to obtain the tract of Mr. Abraham Armenta located in the north-central part of the monument. Armenta held 320 acres by virtue of a homestead entry applied for in 1934 and granted in 1938. But Armenta left the area before 1939, when National Park Service personnel arrived to administer the monument, and during the 1950s repeated efforts to persuade Armenta to sell his property proved fruitless. Like Mrs. Miller, he sold his holdings to a private developer, and in 1970 the National Park Service acquired them by virtue of a land exchange agreement.³³

More successful were the previously mentioned efforts of the National Park Service to purchase the claims of Albert Long and Thomas Alley in the Growler Mining District, and the Orosco inholding at Quitobaquito. Yet the aftermaths of these transactions were marked by reprehensible management decisions so far as they concerned the cultural resources at both sites. By 1958 the Long-Alley and Orosco properties belonged to the National Park Service. The abandoned sites were strewn with litter, although historical structures still stood at both locations. Despite protests from scholars and history enthusiasts over the propriety of such action, Superintendent Monte Fitch ordered the former Orosco

30. *Regulations for Mining and Mining Claims Located on Lands Included within the National Park System* 36 C.F.R./Part 9 (Washington: National Park Service, 1976), p. A-1.

31. *Ibid.*, p. A-2.

32. See Hoy, "Administrative," pp. 30-46, for a detailed accounting of this complex land issue that involved Mrs. Miller, the National Park Service, and others.

33. *Ibid.*, pp. 47-48.

property at Quitobaquito razed. At least one of the old buildings at the pond was present when the first Orosco settled there in 1887. Nevertheless, it succumbed to the bulldozer along with other adobe structures. At the same time the pond was deepened and the dike reinforced. By this capricious decision the Quitobaquito site was stripped of most of its historical and ethnological integrity.³⁴ To compound this grievous error, late in 1961 the area of Growler Pass where the Long-Alley claims had been located fell victim to dynamite and bulldozers, the debris from several of the old buildings used as fill for vacant mine shafts. While the destruction at the Growler site was less than that at Quitobaquito, neither area received the benefit of weighed evaluation before the deeds were executed.³⁵

Thus, in the forty years since the monument was established, the National Park Service has weathered a host of management problems that have afforded no easy resolution. The administration of a monument conceived with lofty purpose but plagued by the constant threat of economic infringement has been no simple accomplishment. Ten superintendents in eleven terms have grappled directly with these problems over the past four decades, each with varying degrees of success.³⁶ And while recent legislative and human developments have helped remedy some of the old concerns over mining and grazing, new ones will undoubtedly challenge the innovative and managerial skills of those personnel yet to be assigned to Organ Pipe Cactus National Monument.

34. *Ibid.*, p. 159.

35. *Ibid.*, p. 162.

36. The superintendents and their terms are: William R. Supernaugh (1939-42; 1943-54), Bates E. Wilson (1942-43), James N. Eden (1954-59), Monte E. Fitch (1959-62), Paul Judge (1962), James B. Felton (1962-65), Foy L. Young (1965-68), Matt H. Ryan (1968-72), Edward C. Rodriguez, Jr. (1973-75), and Ray G. Martinez, Jr. (1975-). *Ibid.*, no pagination indicated.

PART II: DESCRIPTION AND EVALUATION OF HISTORICAL RESOURCES,
ORGAN PIPE CACTUS NATIONAL MONUMENT



PART II: DESCRIPTION AND EVALUATION OF HISTORICAL RESOURCES, ORGAN PIPE
CACTUS NATIONAL MONUMENT

The following properties have been identified as possessing degrees of historical interest and value sufficiently useful to the interpretation and future development plans of Organ Pipe Cactus National Monument. In some cases the dearth of documentary material has produced an incomplete picture of a particular resource, a difficulty that seemingly will never be rectified. The evaluations and recommendations for or against nomination of the properties to the National Register of Historic Places are based upon deliberative consideration of what descriptive historical data exists, upon assessment of whatever surviving tangible evidence remains in each instance, or upon both of these. Properties not recommended for National Register status may be nonetheless retained and in some circumstances they definitely should neither be willfully destroyed nor damaged.

A. Water Sources and Ranches

Water sources and ranches constitute the preponderance of historical sites at Organ Pipe Cactus National Monument. Water sources, which are found at, and which inevitably determined the location of, every ranch site, include springs, ponds, wells, and tanks. Through time they have been the requisite criterion for human occupancy of the Sonoran Desert. Without water, the development of the principal regional economies--cattle ranching and mining--could not have occurred. The presence of water sources has been vital to the occupation and settlement of the region covered by the monument from prehistoric times to the present. The sites here listed as belonging to this category share, to various extents, a significant role in the developing history of the monument region.

1. Quitobaquito

Easily the single most important cultural resource in the area, the Quitobaquito springs and pond in the southwest part of the monument possess historical associations that transcend the centuries. Virtually every ethnic group inhabiting the region over the last 500 years has had either a permanent or transitory connection with Quitobaquito. One of the largest watering places in the entire region, the springs are located inside the United States but 200 yards from the international boundary and a short distance west of boundary marker number 172. Lying at the southern base of the low-rising Quitobaquito Hills, the springs represent the oldest continuously occupied settlement place on monument ground. Kirk Bryan recorded the following geological description of Quitobaquito during his survey of the Papago country in 1917:

The two spring openings lie in a line of seepage marked by a small bench that skirts the granite hills for a distance of about half a mile. Alkaline soil and mesquite bushes mark this line, which trends north of west, approximately parallel to the international boundary. The flow from the spring openings, 43 gallons a minute, is probably not half as much as the

amount of water that escapes from the ground by evaporation. The source of this water can not be the drainage basin of Sonoita River, for the river which is three-quarters of a mile to the south, is fully 100 feet lower, and underground circulation between the river and the spring is prevented by granite outcrops. The water must therefore come either from the Quitobaquito Hills, to the north, or from a deep source within the earth's crust.¹

The origin of the name "Quitobaquito" has been all but obscured by time and has presented numerous difficulties of translation. Indeed, it has never been finally determined whether the term is or is not a corruption of either the Papago or Spanish language. One possibility is that the name Quitobaquito was derived from the Spanish term "quitar vaquita," meaning "look out little cow," or "get away little cow." Another is that the term comes from the Papago, meaning "a place by the lake where the crowfoot gramma grass grows."² Carl Lumholtz, who visited the site early in the twentieth century, believed that "Quitobaquito" came from a Spanish corruption of the Papago word "Alivaipia," which means "small springs."³ Still another possibility is that the name is somehow related to that of the nearby Mexican town of Quitobac and to others having the similar root of "vac" or "bac." Anthropologist W. J. McGee thought that "Quito" is from "ki-to," which described the first ring of thatch placed during construction of a Papago house. "Bac" meant "water," or "watering place," while "ito" was the Spanish diminutive ending applied to differentiate the site from the larger community of Quitobac, located in Sonora thirty miles south of Sonoyta.⁴ There, as Wilton E. Hoy has indicated, "a few . . . ruined adobes are scattered about the Laguna de Quitobac, a large Quitobaquito-type pond used for irrigation and watering stock."⁵

Perhaps the designation "Quitobaquito" postdates Father Eusebio Kino's arrival in the area; he called the place San Serguio and never referred to it as Quitobaquito.⁶ It is logical to assume that the site provided a dependable

1. *The Papago Country*, p. 165. In 1956 the springs' flow measured thirty gallons per minute at a temperature of 80° Fahrenheit. Irish, "Place Names of Organ Pipe Cactus National Monument."

2. Irish, "Place Names of Organ Pipe Cactus National Monument"; Haley, *Jeff Milton*, p. 157n.

3. *New Trails in Mexico*, p. 383.

4. Bryan, *The Papago Country*, pp. 426-27; Irish, "Place Names of Organ Pipe Cactus National Monument." McGee, "Old Yuma Trail," quoted in Wilton E. Hoy, "A Quest for the Meaning of Quitobaquito," *The Kiva* 34 (April, 1969), p. 217.

5. Hoy, "Meaning of Quitobaquito," p. 217. See *ibid.*, pp. 213-18, for the most complete discussion of the etymology of "Quitobaquito."

6. Bolton, *Rim of Christendom*, p. 401.

water source for the cattle herds that developed at neighboring rancherías like Santo Domingo and that the appellation "quitar vaquita" accurately conveys a local incident or portion of an incident involving cattle at that place. Many early references to the site use the form Quitovaquita, wherein the "v" replaces the "b," and "a" the final "o" (both changes are permissible in Spanish). Early maps of the region usually use this form; one of 1866 even designates the place "Quito vaquito," a very close approximation of the original term.⁷ However acceptable this or any other theory may be, much remains to speculation. Possibly records of the Spanish missionaries contain information that could settle the matter conclusively. Until such new documentary evidence arises, the origin of the term "Quitobaquito" will remain in the province of educated conjecture.

Whatever its etymological derivation, the Quitobaquito oasis has for centuries served man's basic need for water in a desert environment. Aboriginal inhabitants included the Piman predecessors of the Papagos who probably used the spring as a base while they roamed the country collecting saguaro and pitahaya fruit. The Papagos did the same, but their occupation of Quitobaquito was more permanent and the site figures prominently in at least one of their legends.⁸ Relatively late, some of the Areneños, or Sand Papagos, took up residence at Quitobaquito after leaving the Pinacate region of Sonora.⁹

The first documented reference to the place was by Kino, who visited Quitobaquito in October 1698, named it San Serguio, and alluded to the presence there of "natives." Other than this and his approval of the site as "a good place," Kino offered no elaboration.¹⁰ In the 1770s the Franciscan missionary Francisco Garces sojourned at Quitobaquito, and probably other travelers frequented the place. By that time its proximity to El Camino del Diablo, the overland route to the lower Colorado River, increased its importance as a watering place, even though another source, the Sonoita River, ran by less than a mile to the south and provided water to travelers further west than Quitobaquito.¹¹

Probably the springs (there was no pond yet) were utilized by many of the migrants en route to California over El Camino in the late 1840s and early 1850s. It is known, however, that sometime during this period the Areneños took to raiding emigrants passing over the trail. Two Mexicans were killed at

7. See "Sketch of Public Surveys in New Mexico & Arizona to Accompany the Annual Report of the Commissioner of the General Land Office for 1866." Map Collection, University of Arizona Library, Tucson.

8. The legend concerns the ogress of the Papagos and was recorded by Captain Juan Mateo Manje in 1699. See Bolton, *Rim of Christendom*, pp. 408-9, and Haley, *Jeff Milton*, p. 157n.

9. Cook, "Documentation of the Arizona Papaguera," p. 285.

10. Hoy, "Early Period," p. 47; Ives, "Population of the Pinacate Region," p. 39.

11. Hoy, "Early Period," pp. 47, 54.

Quitobaquito by these Indians, an incident that triggered retaliation by angry Sonoytans who rode into the Pinacate region and either killed or drove out most of the offensive Areñeños.¹² The Papagos who lived at Quitobaquito in these days often helped wayfarers in need by providing them with food and a place to rest from the trials of the desert.¹³

Documentary reference to Quitobaquito increased at the time of the gold strike, and the simultaneous surge of American interest in the region. In 1854 part of Andrew B. Gray's railroad survey party visited the oasis.¹⁴ During the next year, and following the Gadsden Purchase, Lieutenant Nathaniel Michler's survey crew passed through. Michler noted that "at Quitobaquita there are five springs running for the greater part of the year."¹⁵ And in August 1855 Mexican surveyors established an astronomical point and base camp in their delineation of the international boundary and placed Monument VIII near Quitobaquito. It is not known whether Quitobaquito figured in the Crabb filibustering expedition. Possibly some of Henry A. Crabb's ill-starred adventurers tarried there briefly in 1857 before continuing on to Caborca and death at the hands of enraged Sonorans.

Quitobaquito seems to have existed as a stabilized Indian community for a great many years by the middle of the nineteenth century. It was included in a list of Indian villages prepared by Charles D. Poston in 1863 at about the time the first non-Indian settlement began there.¹⁶ A man named Andrew Dorsey came to Quitobaquito around 1860 and improved the site by digging a pond and building a dam to hold the water. Dorsey either built an adobe house or occupied one already there, then planted pomegranates and fig trees and dug irrigation ditches to service his crops. He ran a store, prospected for gold in the surrounding hills, and named his community Frémont. Dorsey lived at Quitobaquito until the 1890s. He married Rita Celaya, from Altar, and their child, Remigio Andrew, was born at the pond in 1886.¹⁷

Two more Americans, Albert Steinfeld and J. C. Waterman, came to Quitobaquito sometime in the 1870s. Steinfeld was an entrepreneur at Tucson and later at Ajo, while Waterman appears to have had dealings with eastern investors regarding mining properties in the region. At Quitobaquito they opened a mill and a store. Most of the Papago residents had by this time left the site; some

12. *Ibid.*, p. 47.

13. Ives, "Mission San Marcelo del Sonoydag," p. 25.

14. Gray, *The A. B. Gray Report*, p. 216.

15. "Lieutenant Michler's Report," in *United States and Mexican Boundary Survey*, 1:115. An oblique reference to Quitobaquito in 1861 was made by Raphael Pumpelly in *Across America and Asia*, p. 54.

16. Cook, "Documentation of the Arizona Papagueria," pp. 177-78.

17. Hoy, "Early Period," p. 48. The settlement was perhaps named after the famed military frontiersman John C. Frémont.

were settled across the border 1/4 mile from Quitobaquito¹⁸ while others had fled completely because the outlaw Cipriano Ortega had threatened them for not revealing the location of a nearby mine.¹⁹ Steinfeld and Waterman did not stay long at Quitobaquito, and soon after they departed a Mexican family named Lopez settled there and raised goats.

The Lopez family left Quitobaquito in the late 1880s. Soon after their departure one of the most colorful figures in the history of the area arrived on the scene. He was Mikul G. Levy (also known as Manuel, or "M. G.," Levy), a Mexican Jew who came to Quitobaquito in 1888 and opened a store nearby catering to the Indians and to settlers like the Dorseys who still lived there. A native of Roma, Texas, where he was born in 1859, Levy had enjoyed the privilege of a European education prior to his entrepreneurial attraction to the southwestern desert country. At Quitobaquito Levy built his store on the flat tract east of the pond and purveyed mining supplies, food, and clothing that he imported by mule train from Caborca.²⁰ Becoming increasingly involved in mining, Levy in 1892 left Quitobaquito but remained in the proximity of the monument lands and pursued his various interests. A Frenchman storekeeper named Jose Lorenzo Sestier continued to operate Levy's store at the pond. Sestier was a native of Brest, France, and possibly had sought gold in the border country along El Camino del Diablo before joining Levy at Quitobaquito. He likely worked in other stores in the vicinity, including that of Dorsey also at Quitobaquito. Sestier died at the pond in 1900 and was buried on a small rise north of the site. Levy covered the grave with a cement slab, erected a headstone topped with a cross, and plastered both with gravelly cement. On the headstone Levy inscribed the following:

Jose Lorenzo Sestier
Born Brest, France
Died
Quitobaquito
Feb. 9, 1900
Age 74

Sestier was succeeded as storekeeper at Quitobaquito by Jose Leon.²¹

Sometime in the early 1890s Andrew Dorsey moved away from Quitobaquito. Cipriano Ortega visited there often, operating an arrastra near the pond and

18. *Ibid.*, p. 49; Hoy, "Administrative," p. 148.

19. Hoy, "Administrative," p. 148, citing Thomas Childs, "History of Quitobaquito."

20. Hoy, "Early Period," p. 50; Hoy, "Frontier Period," no pagination indicated; Childs, "History of Quitobaquito," in Hoy, "Administrative," p. 148.

21. Hoy, "Early Period," p. 50; Hoy, "Frontier Period," no pagination indicated; Jerome A. Greene, Field Notes, Organ Pipe Cactus National Monument, August 1976.

perhaps even a store.²² Soon he departed to devote his full attention to mining and farming at nearby Santo Domingo. Cipriano's brother, Francisco, also lived at the pond.²³ Probably Ortega's departure from Quitobaquito inspired many of the Papagos to return and renew their settlement there. One prominent Papago was Juan Jose, whose daughter married an Indian named Louis Ortega. Ortega and his wife resided at Quitobaquito from 1885 to 1898 or 1899 when they moved north to Darby Well. Two sons of Juan Jose, one named Tomas, the other Jose Augustine, also lived at Quitobaquito.²⁴ Other Indians from throughout Papaguería came to Quitobaquito and camped overnight en route to the Gulf of California to obtain salt.²⁵ The 1896 boundary survey party reported some Papago renegades residing, presumably, near Quitobaquito,²⁶ and noted the presence of Mexicans there:

About 6 miles [*sic*] west of Sonoyta is the little settlement of Quitobaquita, near some fine springs, which burst out of the hills on the United States side of the line, but serve to irrigate a field near the river, on the Mexican side. Two families of Mexicans reside here, but the houses near the springs all lie within the limits of the United States.²⁷

And in 1900 Anthropologist W. J. McGee who passed through Quitobaquito observed "two adobe houses besides a half-dozen native huts" situated near the pond. At Quitobaquito, wrote McGee,

The entire white population (Mr. M. G. Levy, merchant, mine-owner, justice of the peace, and deputy sheriff) was avidly hospitable, the native residents attentive, as became the unusualness of the event; and the side-barrels and half-dozen canteens of the outfit were soon filled with the slightly alkaline yet palatable and wholesome water from the spring.²⁸

One frequent visitor to the Quitobaquito pond about this time was Thomas Childs, Jr. Childs ran a cattle operation near Ajo but had mining interests near the border and visited Quitobaquito often in the early 1900s. Married to a Papago woman, Childs accompanied her to the pond where her relatives lived, and in 1903 or 1904 rebuilt the irrigation ditches there. He raised some produce at

22. Hoy, "Early Period," pp. 48, 49.

23. *Ibid.*, p. 48.

24. *Ibid.*, pp. 48, 50; Childs, "History of Quitobaquito," in Hoy, "Administrative," p. 148.

25. Gray Interview.

26. *Report of the Boundary Commission.*, p. 21.

27. *Ibid.*, p. 23.

28. "Old Yuma Trail," p. 131.

the pond, especially watermelons, which he liked best. Childs believed the other crops became too salty from the alkaline content of the soil at Quitobaquito.²⁹ While there, he tried to teach the Indians how to care for their dead. "I made their first coffin at Quitobaquita in 1904," he wrote. "But they didn't get the idea. Sometime after the first customer used the box another Indian died. They dumped out the bones and put in another new corpse."³⁰

By the spring of 1907 all of the Indian residents at Quitobaquito had inexplicably moved away. Some returned in the fall. When the expedition under Dr. Daniel T. MacDougal arrived at the settlement they found Childs, John Merrill, and Reuben Daniels living there. Apparently Daniels was the only permanent non-Indian resident, and he grew produce near the pond and tended a small herd of goats.³¹ Concerning Quitobaquito, MacDougal noted that "a group of small springs ooze from the hillside a few feet north of the boundary line, and in flowing down to the lower ground their waters serve to irrigate a small field on the Mexican side."³² William T. Hornaday, who accompanied the expedition, recorded his recollection of the place:

Although Quitovaquita was entirely quiet and inoffensive, its atmosphere was depressing. It is one of the spots in which I would not like to die, and would hate to live. Of its eight houses, only four were inhabited, and the others were crumbling to the inevitable ruin that in every vacant adobe house follows swiftly upon the heels of the departed tenant. The waters of the spring have made a pond, but it looks stagnant and unwholesome. There are trees growing about the place, and a sprinkling of brush along the brook of the spring; but the settlement is not inviting.³³

Hornaday pursued his interest in conversation with Reuben Daniels:

'Won't you tell me what turn of fortune led you to settle in a place so little and lonesome as Quitovaquita?'

At first Mr. Daniels was rather surprised by this unexpected question; but after a keen glance and a moment's pause, in which he evidently decided that it was not put through any unfriendly intent, he replied very frankly,

29. Hoy, "Early Period," p. 51; Hoy, "Frontier Period," p. 210.

30. Quoted in Hoy, "Frontier Period," p. 210.

31. Hoy, "Early Period," p. 52; Childs, "History of Quitobaquito," in Hoy, "Administrative," p. 148; MacDougal, "Across Papagueria," p. 7.

32. MacDougal, "Across Papagueria," p. 7.

33. *Camp-Fires on Desert and Lava*, p. 122.

'Oh, I'm not staying down here because I'm stuck on the country. Like everybody else, I'm looking for an opening, somewhere. But, after all, there are much worse places for a man to live than little Quito and Sonoyta.'

That was all that he cared to say on the subject, for he was at all times a man of few words.³⁴

Daniels made a mixed impression on members of the MacDougal expedition. At Quitobaquito he was given a supply of cartridges, of which he had had none for some time. Rather than conserve the ammunition, Daniels went on a shooting spree, killing jack rabbits and coyotes for no apparent reason. Wrote Hornaday: "To us it seemed rather odd that a cowboy would spend time and good cartridges-- a hundred miles from a railroad--in shooting such dreadfully cheap game as jack-rabbits."³⁵ Also accompanying the party as guide was Daniels's friend Jefferson Davis Milton, whose official capacity was immigration agent for the border region between Nogales and Yuma. Because the area around Sonoyta proved especially attractive for aliens illegally entering the United States, Jeff Milton posted himself in the Mexican border town and set up a semipermanent station at Quitobaquito.³⁶ Milton also had mining interests in the area.

Other scientific survey teams visiting the border country reported on conditions at Quitobaquito. In 1909-10 the geographer Carl Lumholtz led a party into the Papaguería and at Quitobaquito sought the guide services of an Areneño medicine man named Cara Colorada, or Pancho.³⁷ Lumholtz offered a pastoral description of the place. The springs of Quitobaquito, he observed,

in futile attempts at cattle raising and mining have been deflected into a dam, now used solely by Indians. The tiny stream, fed by the springs, carries beautiful, limpid water amid banks white with mineral salts; the fresh green weeds at the bottom are also refreshing to behold. When heavy showers fall, connection is made with the Sonoita River, and the same minnows which were seen there were splashing in the streamlet up to its very sources. The dam, of only moderate size, made a charming impression with the surrounding trees and bushes here and there reflected in it. There were a few dark gray and black water hens here, one white heron and some ducks, and at dusk seven fine-looking geese swooped down into the pond, evidently intending to spend the night there.³⁸

34. *Ibid.*, p. 123.

35. *Ibid.*, pp. 123-24.

36. Haley, *Jeff Milton*, pp. 345-46; Hoy, "Early Period," p. 52.

37. Lumholtz, *New Trails in Mexico*, p. 198.

38. *Ibid.*, pp. 198-99.

In 1914, a few years after the Lumholtz visit, an ethnological survey of the area reported twenty-five Indian people (Areneños) in four families residing at Quitobaquito. At that time only four or five houses stood near the pond on the United States side of the boundary.³⁹ Three years later Kirk Bryan stopped at the oasis while conducting his geological study of the Papaguera. Bryan reported that while the springs were located in the United States, the pond and most of the houses were located in Mexico and that the "unfortunate division of the water and the cultivable land has hitherto prevented permanent settlement except by the Papagos, who are privileged characters on both sides of the line and to whom land titles mean nothing."⁴⁰ But by that time turbulent political conditions existed in Mexico and most of the Papago inhabitants of Quitobaquito had drifted away.⁴¹ Arizona National Guard soldiers camped briefly at the deserted village while they watched the border for Villistas.⁴² Bryan investigated the springs during his stopover and concluded that

There are two main spring openings, and both show evidence of excavation to increase and concentrate the flow. The larger and more northerly opening has a pool about 2 feet deep and is shaped by an overhanging bank. The temperature of the water was 80.3° F. on September 30, 1917. In the other spring opening the water can be seen emerging from joint cracks in a pinkish granite. The temperature of the water was 80° F. on the same date.⁴³

In 1919 an American named Johnny Johnson dug a well and erected an adobe house on the flat land some distance west of Quitobaquito. But this endeavor was short-lived; Johnson was frightened away from the area by Richard C. Wright and others who were developing property at nearby Williams Spring.⁴⁴

It was the Sand Papago family named Orosco that enjoyed the most enduring residence at Quitobaquito, longer than any white settler there and longer than any other Indian family. Luis Orosco took up permanent abode at the pond in 1887. He had previously lived there, but along with other Areneños he had been driven away by Mexicans who sought to terminate raiding by these Indians. Luis had settled a short distance below the border. After ceasing his raiding activities, Orosco moved back to Quitobaquito where he remained until his death.⁴⁵ A

39. Cook, "Documentation of the Arizona Papaguera," p. 177.

40. Bryan, *The Papago Country*, p. 427.

41. *Ibid.*, pp. 345, 427.

42. Hoy, "Early Period," no pagination indicated.

43. Bryan, *The Papago Country*, pp. 164-65.

44. Hoy, "Frontier Period," no pagination indicated.

45. Hoy, "Early Period," p. 48; Childs, "History of Quitobaquito," in Hoy, "Administrative," p. 148.

son, Jose Juan Orosco, was born about 1890 to Luis and his wife. Jose Juan lived at Quitobaquito all his life, except for a period in 1907 when all residents temporarily left the place. He succeeded his father in farming the area and raising cattle. Jose Juan irrigated about five acres for corn, figs, melons, and pomegranates; his cultivated ground straddled the border and ran into Mexico. His cattle usually numbered between 75 and 100 head. Orosco made few improvements at the site and always maintained that he had made no changes to the pond area or to the dam and irrigation ditches built by Dorsey in the 1860s. He constructed a large *molino*, or grinding mill, with which he prepared meal from his corn. Orosco became an American citizen in 1924 with passage of the universal Indian Citizenship Act.⁴⁶

Jose Juan died April 23 or 24, 1946, at the age of fifty-six. He was buried in the small Papago cemetery located north of the Quitobaquito pond, together with his saddle, overcoat, and a number of canned goods which were soon stolen.⁴⁷ Local rancher Abe Gray was appointed executor of Orosco's estate, which consisted principally of cattle that were turned over to Jose Juan's son, Jim Orosco, who lived with his father.⁴⁸ Jim had been born about 1905 a few miles northwest of the pond at Cipriano Well, and was married to Maria Antonio. They had a son, and after Jose Juan's death the remaining Oroscos continued to farm and graze cattle at Quitobaquito.⁴⁹ It was Jim who encountered the stiffening opposition of the National Park Service in that agency's effort to rid the monument area of private inholdings and the grazing problems they entailed.

Existing improvements at Quitobaquito within a few years of Jose Juan's death consisted of the pond, approximately two feet deep and covering an area ranging between a quarter and a half of an acre; one single-room adobe house; one double-room adobe house (where Jose Juan died); one outhouse; one Papago-style *jacal* built of saguaro cactus ribs by Jim Orosco in 1947; one tin shack; two livestock corrals; and more than 4,000 feet of irrigation ditches, over 700 feet of which were located in Mexico. There were, in addition, eight fig trees and twenty-two pomegranate trees, nine of which were actually located south of the border. Another adobe, or stone, building stood in Mexico. Jose Juan had farmed approximately 6-1/2 acres, one-third of which lay in Mexico.⁵⁰

46. Hoy, "Administrative," p. 138.

47. Hoy, "Early Period," p. 49; Hoy, "Administrative," pp. 143, 143a. Bobby Gray reported that his brother Abe helped build Jose Juan's coffin: "Didn't have much lumber on the desert, so they couldn't make one long enough. They had to double him up a little, bend his knees and so forth." Gray Interview.

48. Gray Interview.

49. Hoy, "Early Period," p. 49.

50. Hoy, "Administrative," p. 141; Map, "Detail at Quitobaquito Spring Area," in *ibid.*

Soon after Jose Juan Orosco died, Quitobaquito took on new significance as a border station of the U.S. Bureau of Animal Industry, which was trying to stem the spread of hoof and mouth disease into the United States from Mexico. By 1949 the BAI had erected two tent frame structures north of the Quitobaquito pond. The agency also constructed concrete spills at the overflows of the two main springs and placed about one thousand feet of 3/4-inch pipe from the springs to the tent frames. All of this transpired despite the opposition of Jim Orosco, who considered the occupation a violation of his property rights.⁵¹

The National Park Service sought resolution of the Orosco property-grazing rights matter all through the decade following the death of Jose Juan. Jim Orosco was advised that a permanent fence would be built along the border dividing his property. Eventually Orosco consented to sell his rights to the Government, and in 1955 he signed a property condemnation agreement. On July 8, 1957, he turned over the acreage to the National Park Service for \$13,000.⁵²

Today the Quitobaquito springs and pond bear scant trace of their history. The oasis comprises one attraction for visitors along the Puerto Blanco drive through the monument. The Park Service discontinued use of the old road that passed by the north side of the pond; today a gravel road leads to a small parking area east of the pond near the international border. Visitors can walk partly around the pond on a trail and learn something of the site's history from an interpretive marker. None of the early structures, save the Frenchman Sestier's grave, are yet standing; the National Park Service bulldozed them away a few years after acquiring the tract from Jim Orosco. The spring head is located about 100 yards northwest from the pond. Sestier's grave is on a rise about 150 yards north of the pond. Although the Orosco buildings have all been plowed under, their approximate locations can still be discerned. There was once a building used as a customs house at Quitobaquito, but this burned long ago. Just north of the main spring head lies a secondary spring that feeds into a pipeline that in turn feeds the pond. South and southwest of the pond is the site of the fields irrigated by the Oroscos. Beyond the hills north of the pond, about 1/2 mile away, is the Orosco family cemetery plot, where Jose Juan and his father, Luis Orosco, among others, are buried.⁵³

Despite the dearth of historical fabric remaining at Quitobaquito, the site is ideal for interpreting the themes of Indian prehistory, Spanish exploration and missionary activities, transportation and trails (El Camino del Diablo), the border surveys, and early American enterprise in the desert environment. These augment interpretation of the site in terms of its natural history. Because of its historical associations and its strategic importance as a dependable desert water source, Quitobaquito qualifies to be designated as Second Order of Significance. It is highly recommended for inclusion on the National Register of Historic Places.

51. Hoy, "Administrative," p. 151a; Hoy, "Early Period," p. 121.

52. Hoy, "Administrative," pp. 150-51. See *ibid.*, pp. 138-51, for a detailed accounting of the NPS-Orosco settlement.

53. Greene, Field Notes.

2. Dos Lomas Ranch and Blankenship Well

The most important ranch-well complex within Organ Pipe Cactus National Monument is the Dos Lomas Ranch located at the Blankenship Well. Dos Lomas is often called Blankenship Ranch, but this term is historically wrong; although Lonald Blankenship dug the well at this location about five miles southeast of Lukeville, the ranch was built after he had left the area. Blankenship dug a well and settled at this location sometime around 1915. He lived in a small adobe ranch home (later destroyed by flood) which he called "Rattlesnake Ranch." With his wife and two sons, Lonald, Jr., and Joseph, Blankenship ran several hundred head of cattle on lands now part of the monument.¹

In 1919 Lon Blankenship sold his water rights and improvements to Robert Louis Gray, a rancher from Benson, Arizona. Gray paid \$5,000 for the property, which at that time included the well and windmill, the ranchhouse and corrals, and watering rights at Williams and Aguajita Springs, besides all of Blankenship's cattle. Gray and his family moved onto the property in 1920 and brought in additional cattle. The Grays erected another ranchhouse, an adobe structure with four rooms and a ramada along two sides, the present "Dos Lomas," which Robert Gray named after two low hills lying northwest of the site. Gray later filed a homestead claim on the place, but this was denied because of prior utilization elsewhere of his homestead privilege. Gray attempted to purchase the land in 1939, but by this time the national monument had been created and his application was denied. Gray resided at Dos Lomas by virtue of a renewable grazing permit.²

The well dug at the ranch site by Lon Blankenship underwent few modifications by the Grays. Kirk Bryan, who evaluated the supply in 1917, stated that the well was about 65 feet deep and that water could be reached at 54.4 feet. By 1966 the well measured 100 feet deep and gave water at 80 feet.³ An inventory of the real estate at Dos Lomas shows that, besides the well and windmill, the ranch comprises the ranchhouse, two frame outbuildings, a corral, and a concrete watering trough. Situated at the southern base of a steep rocky knoll, the Dos Lomas house is an ell-shaped adobe structure measuring about 40 feet long by 30 feet wide. The ramada, or portico, likewise ell-shaped, consists of a roof that is fashioned of earth and saguaro ribs and supported by mesquite posts. The roof of the house is flat and is covered with earth and blacktop. The building stands slightly less than 10 feet in height. A coating of cement plaster helps retard erosion of the adobe fabric. The floor of the house is earthen and there are five windows and three doors.⁴

1. Hoy, "Frontier Period," no pagination indicated; Irish, "Place Names of Organ Pipe Cactus National Monument." Blankenship dug another well on the border, two air miles from Sonoyta, in what is today the federal customs compound. Bryan, *The Papago Country*, p. 342.

2. Appleman and Jones, *Blankenship Ranch*, pp. 21-22; Hoy, "Frontier Period," p. 238; Irish, "Place Names of Organ Pipe Cactus National Monument."

3. Appleman and Jones, *Blankenship Ranch*, p. 31.

4. *Ibid.*, pp. 32, 37-38.

Two board outbuildings with metal roofs are situated near the ranchhouse. The largest is about 50 feet away and probably served as a saddle shed. The smaller building is about 100 feet from the ranchhouse. Built of wood and saguaro ribs, it was probably used for storing grain.⁵ A ramada supported by six mesquite posts once stood near this structure.⁶ The Blankenship/Gray corral has three compartments and a loading chute and ramp. Posts for the corral are made from railroad ties and mesquite, while mesquite branches laid laterally form the sturdy corral walls.⁷ One of the more unique structures at Dos Lomitas is a small building, composed of railroad ties and corrugated sheet metal, that was erected in the 1930s on the foundation of Blankenship's old adobe house. The ties are placed upright around the perimeter of one-half of the structure, while the sheet metal forms the walls of the other half. The roof is of corrugated iron and the building measures about 28 feet long by 13 feet wide and about 8 feet high.⁸

Dos Lomitas ranch has remained unoccupied most of the last two decades, and especially since the death of Robert Louis Gray in 1962. The National Park Service has completed stabilization work at the site and one of the tour roads leads out to the ranch from Arizona State Highway 85. The adobe ranchhouse offers a prime example of a traditional form of regional frontier architecture. An interpretive marker stands near the well, and the site, by virtue of its overall good condition and its proximity to the highway and the monument visitor center, is an ideal memento of the desert-situated range cattle industry. Here that theme could best be interpreted with emphasis on the Gray family's development of the ranching economy in the Sonoita Valley border country. Dos Lomitas and Blankenship Well serve to exemplify man's resolve to exist under hard conditions in a land normally resistant to the proclivities of human endeavor. The site meets criteria for classification under the Second Order of Significance and is hereby recommended for nomination to the National Register of Historic Places.

3. Gachado Well and Line Camp

Located close to the international boundary two and one-half miles west of Dos Lomitas, and like distance from the highway, Gachado Well was named for a gnarled old mesquite tree that once stood near the southwest corner of the corral there (from "agachado," meaning "to stoop," or "to bend over").¹ Dug by Lon Blankenship between 1917 and 1919, the well extended to a depth of 80 feet and was pumped to the surface by means of a windmill. Evidently the site contained a spring, for Papago Indians claim to have obtained water at Gachado

5. *Ibid.*, p. 39; Hoy, "Administrative," p. 56.

6. Appleman and Jones, *Blankenship Ranch*, p. 39.

7. *Ibid.*, p. 40.

8. *Ibid.*, pp. 39-40.

1. Irish, "Place Names of Organ Pipe Cactus National Monument."

for centuries before the well was placed there.² The well is not presently in use and the windmill has been removed. The other developments at Gachado, notably an adobe house and a corral, were built in the 1930s by Robert Louis Gray, who used the place as a line camp. Henry and Bobby Gray lived there together for a short time, and then Abe Gray settled for awhile at Gachado. "Water wasn't too good, kind of salty," reported Bobby Gray.³

The one-room adobe house provides an exemplary model of this frontier style of architecture. The structure measures about 23 feet in length, 11 feet in width, and 9 feet in height, and contains one door and two windows. The floor is dirt. A unique feature of the building is its ceiling and roof. Supported by cross beams and vegas, the roof consists of a layer of organ pipe cactus rib poles crossed by a layer of saguaro ribs. Over the saguaro ribs is placed a layer of cardboard, followed by one of creosote bush, then a layer of earth and blacktop.⁴ The Park Service has recently rehabilitated the structure, repairing eroded adobe and replacing, where needed, the protective cement plaster covering.

Gachado corral offers a prime example of corral construction in the desert where building materials are scarce. It consists of two compartments, each approximately 60 by 80 feet, constructed entirely of mesquite, palo verde, and other accessible materials native to the region. There is a mesquite loading chute and ramp, and a gate trap that permits livestock to enter, but not to leave, the corral. Inside is a concrete watering trough, 50 feet long, that has a holding capacity of 2,000 gallons.⁵

Gachado well and line camp constituted an important component of the Dos Lomitas ranch and the Gray family's cattle-raising business. It is an attractive, well-maintained complex that is accessible for visitors, and it should be interpreted in conjunction with the Dos Lomitas site. Gachado offers the best example of a typical line camp and well complex within the monument. It qualifies for the Second Order of Significance and warrants nomination to the National Register of Historic Places.

2. Appleman and Jones, *Blankenship Ranch*, p. 22; Irish, "Place Names of Organ Pipe Cactus National Monument." Dates of construction of Gachado Well have been revised from *ibid.* on the basis that Bryan did not mention the well when he came through the area checking water sources in 1917, and it seems illogical that Blankenship would have dug the well after he had sold his property to Robert Louis Gray in 1919.

3. Gray Interview. The house does not appear in a survey map completed in 1931. See "Township No. 18 South, Range No. 5 West, Gila and Salt River Meridian, Arizona (Fractional)." Bureau of Land Management Office, Phoenix, Arizona.

4. Appleman and Jones, *Blankenship Ranch*, pp. 41-42.

5. *Ibid.*, pp. 32, 43-44.

4. Dowling Well and Ranch

The Dowling complex represents the site of the earliest-known Anglo-American residence in what is today Organ Pipe Cactus National Monument. In the 1850s Edward E. Dunbar and a man named Belknap operated a trading post at the site and presumably a well was there then. Dunbar supplied emigrants passing through Sonoita and along the nearby El Camino del Diablo. Dunbar's establishment figured in the ill-fated scheme of Henry A. Crabb to appropriate lands in Sonora in 1857. Crabb's expedition stopped briefly at Dunbar's store en route to Caborca, but four ailing members of Crabb's party remained at the place. There they received the news from Caborca that Crabb and the others had been killed. The men believed themselves safe in the newly-purchased Gadsden Territory, but irate Mexican soldiers crossed the border near Sonoita and killed them all. Edward Dunbar escaped the slaughter, having gone with mail to Yuma.¹

Years later, in the 1890s, an Irishman named Patrick T. Dowling settled at the well. Dowling was interested in the mining potential of the region and ran the El Rosario Mine over the border near Sonoita. At the well Dowling built a mill to process the ore brought from his mine, and eventually he erected a smelter there. Apparently Dowling dug a new well at the location and operated it by a steam pump fired with ironwood.² Dowling also kept a store. He was described as a ruthless character; he once had a confrontation with Jeff Milton in the store during which Milton drew down on him with a .45 Colt revolver.³ During the 1890s Mikul G. Levy bought the Victoria Mine (La Americana) in the Sonoita Mountains from Cipriano Ortega. Levy associated himself closely with the area and before long purchased the store at Dowling Well and operated it along with the mine. He moved the boiler from the steam pump up to the Victoria, three miles away, from which it was stolen in the 1930s. Meantime, Dowling's own facility was closed down by U.S. Customs agents who objected to his transporting Mexican ore into the United States. An adobe customs house later stood on the Dowling site until about 1915 when it was abandoned.⁴

In recent years Dowling Well has been the home of Robert L. Gray, Jr. Bobby Gray claimed to have first lived at the place as a boy shortly after his father bought the Blankenship property in 1919. Late in his life Bobby recalled how, in 1929, United States Army troops were stationed at Dowling for several weeks as they observed events across the border. Mexico was then experiencing political disturbances under the Calles regime and there was concern that a contingent of rebels might seek refuge in the United States. The American soldiers soon withdrew from Dowling Well. Bobby left the monument area as a

1. Forbes, *Crabb's Filibustering Expedition*, p. 16; Hoy, "Early Period," no pagination indicated.

2. Haley, *Jeff Milton*, p. 190; Gray Interview. Kirk Bryan noticed the smelter there in 1917. *The Papago Country*, pp. 342-43.

3. See Haley, *Jeff Milton*, p. 192, for details.

4. Cook, "Documentation of the Arizona Papaguera," p. 292; Irish, "Place Names of Organ Pipe Cactus National Monument"; Gray Interview.

young man, but returned permanently to Dowling in the early 1940s. He contended that he had maintained residence at the site over the years and in 1951 he was awarded a homestead patent for nearly 158 acres at Dowling.⁵ The land was surveyed by the Bureau of Land Management in 1931 and maps completed then depict the fenced land near the international boundary, a windmill, and a ranch house. Northeast of these structures were located some adobe ruins, which might have been left from Dowling's or Levy's habitation there or from the customs house.⁶ In the late 1940s Dowling Well became a tented base camp for U.S. Bureau of Animal Industry personnel as they tried to curb the spread of hoof and mouth disease from Mexico.⁷

Today the central structure at Dowling Well is the ranch house, probably erected in the 1920s after the arrival of the Grays. It is built of adobe, has five rooms and a wooden roof, but no electricity. Bobby Gray relied on an outside generator for emergency electricity. The house is situated on a hill near the old well likely put in by Pat Dowling. This well runs 150 feet deep into the ground. Southwest of this well is a newer, motor-operated one. West of the old well is a tank containing water that is fed into troughs located inside the corral. The corral consists of four pens and one chute constructed of palo verde wood staked between interally-placed paired poles of mesquite vertically arranged. North of the corral is a spot where cattle were butchered. Other structures include a building for storing hay and a tool shed, both made of corrugated sheet iron. The remaining buildings are small and are likewise built of sheet iron.⁸ Today the Dowling Well and Ranch are under private ownership and access is therefore prohibited.

Contingent on National Park Service acquisition of the property, historical interpretation of the Dowling Well and Ranch site should address the themes of early American settlement, the filibustering expeditions, mining, and cattle ranching. However, the site is marginal in respect to its retention of resources associated with its early past, and the cattle and mining industries might best be interpreted elsewhere, such as at Dos Lomitas. The site is nonetheless sufficiently important to merit classification under the Second Order of Significance and nomination to the National Register of Historic Places.

5. Bates Well

The Bates Well complex consists of another of the Gray ranches plus several wells located at the north end of the Bates Mountain range, and south of the Growler range, in the northwestern part of the monument. It lies two miles

5. Hoy, "Frontier Period," no pagination indicated.

6. United States Bureau of Land Management survey map (fractional), Township 18 South, Range 6 West, Gila and Salt River Meridian, Arizona, 1940. Bureau of Land Management Office, Phoenix, Arizona.

7. Hoy, "Administrative," p. 151a.

8. Gray Interview; Greene, Field Notes.

below the north boundary and is roughly equidistant between the site of the old Growler Mine to the southwest and Growler Pass to the northeast.¹ Bates Well, or Growler Well as it was sometimes called, one of the earliest developments in the area, was dug around 1886, perhaps earlier, by a settler named W. Bates. However, the area was known to aboriginal occupants long before that time; the Papagos termed the place "T junikáatk," meaning, "where there is saguaro fruit," and frequented it during their annual food-gathering routine.² The Sand Papagos, or Areneños, reportedly lived at the site, too,³ probably because of the presence of numerous springs in the nearby mountains. And the Bates Well area also proved a popular stopping place for Papagos on their way overland to gather salt in the Gulf of California. Mexicans referred to the well as "El Viet," supposedly a linguistic corruption of the word "Bates."⁴

During the period of development of the Growler Mine and other prospects in the Growler District, Bates Well became a paramount water source. It served as a vital crossroads for the old east-west Tucson-Yuma road and north-south route between Ajo and Sonoita. In 1909 when Carl Lumholtz visited Bates Well, he noted the presence of a store there, and "a few Americans residing."⁵ Sometime before 1913 Reuben Daniels acquired Bates Well. When that well caved in, Daniels dug another next to it. Then he and a man named Charles Puffer dug still another well a short distance southwest of Bates Well and constructed a windmill and some corrals at the new site, informally called Daniels Well. The entrance into the Bates Well area of the cattle industry dates from this time and as many as 2,000 cattle ranged over the immediate ground prior to 1920.⁶ Kirk Bryan saw Bates Well as a jumping-off place into the desert wasteland. "Here," he wrote, "the traveler takes leave of civilization and plunges into the most desolate part of the Papago country."⁷

In March 1917, Samuel E. and John T. McDaniels bought Rube Daniels's property at Bates Well for \$17,000. The McDaniels brothers operated the Bates Well ranch with mixed success. In that year and again in 1920 they faced heavy

1. Hoy, "Frontier Period," no pagination indicated; Irish, "Place Names of Organ Pipe Cactus National Monument."

2. Lumholtz, *New Trails in Mexico*, p. 378.

3. *Ibid.*

4. *Ibid.*; Bryan, *The Papago Country*, p. 418; Will C. Barnes, *Arizona Place Names* (Tucson: University of Arizona Press, 1935), p. 39.

5. *New Trails in Mexico*, p. 378. This could have been the community in Growler Pass, however.

6. Bryan, *The Papago Country*, p. 418; Hoy, "Frontier Period," no pagination indicated.

7. Hoy, "Frontier Period," no pagination indicated.

drought at the site and removed most of their cattle to other grazing lands.⁸ In 1922 the brothers decided to sell all their stock at Bates Well. Sam McDaniels continued to live at the ranch while John McDaniels went into the cattle business in Mexico.⁹ Meantime, Rube Daniels, who with his family still resided at Bates Well, was persuaded to buy back the property. Then, shortly before his death in 1926, Daniels resold the ranch to the McDaniels brothers. Sam McDaniels soon sold his interests to Albert Behan, a former deputy sheriff of Ajo, who eventually sold out to John McDaniels. McDaniels took on another partner and erected a new ranchhouse at Bates Well, but the structure caught fire and was completely destroyed.¹⁰

In 1919 Bates Well figured as a focal point in a railroad survey undertaken by Colonel John Greenway of the New Cornelia Mining Company at Ajo. Faced by exorbitant freight costs under the nationalized railroad system, Greenway determined to build his own railroad through the desert to Puerto Penasco on the Gulf of California. His preliminary line, begun in May 1919, ran from near Ajo to Growler Pass, then around by Bates Well and past the Growler Mine before heading south through the present monument grounds into Mexico. The project, initiated secretly, was called the Arizona and Sonora Railroad. Despite clearance from the Mexican government, work was delayed, postponed, and finally stopped altogether when the anticipated construction funds failed to materialize.¹¹

One event of local historical interest took place at Bates Well on June 23, 1927. This was a shootout between Wilbur Deming on the one side, and John Cameron and W. C. ("Boots") Burnham on the other. Deming was a fugitive from justice. On June 20 he shot a man at Tom Child's ranch southeast of Ajo and fled by automobile to Sonoita. Mexican officials confiscated the car, but Deming somehow crossed back into the United States and, by either foot or horseback, reached Bates Well where he took refuge. On June 23 Cameron and Burnham, who were assisting Deputy Sheriff Frank Branson, encountered Deming at Bates Well. Deming reportedly drew his pistol, whereupon the two men fired and killed him. Thus ended the gunfight at Bates Well.¹²

The McDaniels property at Bates Well changed hands once again when Henry D. Gray, son of Robert Louis Gray, bought it in April 1935 for the sum of \$2,500.¹³

8. *Ibid.*; Bryan, *The Papago Country*, p. 418.

9. Hoy, "Frontier Period," no pagination indicated.

10. *Ibid.*

11. Myrick, *Railroads of Arizona*, pp. 410-11.

12. Details of this encounter, together with the actions precipitating it, are discussed at length in Hoy, "Frontier Period," pp. 265-68.

13. *Ibid.*, no pagination indicated. For some of the existing improvements on the property in 1932, see "Township 14 South, Range 7 West, Gila and Salt River Meridian, Arizona. Bureau of Land Management Office, Phoenix, Arizona.

The thirsty Gray cattle had posed a problem by constantly roaming onto the McDaniels ranch from the vicinity of Alamo Canyon, which had little water. Henry and Bobby Gray rode over to Bates Well every other day to herd their cattle back. Rather than continue that routine, Henry Gray bought the ranch and specifically the water rights to Bates Well and Daniels Well.¹⁴ In 1940 Henry Gray applied for a homestead grant for the 160-acre tract, much as McDaniels had done after first acquiring the land. Gray's petition was rejected because the tract constituted part of the land withdrawn in 1937 as part of the Organ Pipe Cactus National Monument. Henry Gray nevertheless continued his tenuous occupancy of the Bates Well ranch¹⁵ and in the early 1940s he moved the present ranch house to the site from its original location at the Growler Mine.¹⁶ In 1951 a flood in nearby Growler Wash destroyed Daniels Well. To replace it, Henry Gray dug another in the summer of 1953, located just in front of his ranch house and today called Henry's Well.¹⁷

Henry Gray's ranch house today remains the primary structure at Bates Well. It is a simply-constructed frame building with a corrugated iron roof. The exterior is plastered cement. The house has two rooms--a kitchen and a large bedroom--and lighting is primarily by kerosene lamp; there is neither electricity nor a telephone. Gray's ranch house is probably the only surviving building of those once standing at the Growler Mine. About 250 yards east of the house is the original Bates Well with a concrete tank beneath it. Another well, presumably that dug by Rube Daniels to replace Bates Well, lies just east of the Gray ranch house and is operated by a gasoline pump. Henry's Well, dug in 1953, is located slightly southwest of the house. One hundred yards south of the house are two small line shacks, one made almost entirely of corrugated iron, while the other, located further east, consists of wood paneling and is of more recent construction. It has a sheet metal roof. Both line shacks are one-room structures. The westernmost one has a ramada built of mesquite posts, saguaro ribs, and metal tubing.

West of Bates Well is a one-room, portable cabin, and north of the cabin is a storage shed. East of the well is a large corral, with three compartments, made of mesquite, palo verde, and upright-placed railroad ties (brought by wagon from the mine at Ajo). Another corral of two pens and one holding pen and a loading chute is situated at the extreme western edge of the ranch. One pen contains two watering troughs that are fed by pipeline from Henry's Well, which pumps continuously. This pen is constructed from railroad ties arranged atop each other in a checkerboard fashion, so that the ties of each panel alternate with those of the preceding panel. The other pen of the corral is made of mesquite and palo verde in the typical border manner. Daniels Well, caved in and abandoned by Henry Gray in 1951, is a short distance west of the corral.¹⁸

14. Gray Interview; Appleman and Jones *Blankenship Ranch*, p. 25.

15. Hoy, "Frontier Period," p. 238.

16. Greene, Field Notes.

17. *Ibid.*; Hoy, "Administrative," p. 70.

18. Greene, Field Notes.

With the death of Henry Gray in September 1976 the property at Bates Well should revert to the National Park Service. Historically, the area represents several themes, notably prehistory, Indian occupation, and cattle ranching, although these, it would seem, can better be interpreted to the public elsewhere on the monument. Bates Well belongs to the Second Order of Significance and warrants nomination to the National Register of Historic Places.

6. Wall's Well

This well, located just beyond the extreme northeastern boundary of the monument, was dug by Frederick Wall around 1870. Wall supposedly discovered the Growler Mine, which he named for his friend John Growler. Wall's Well is near the Kuakatch Wash, an arroyo that runs adjacent to the northern edge of the Ajo Mountain range. Originally the well ran 46 feet deep; it later was drilled by prospectors to a depth of several hundred feet. Situated on the old Tucson-Yuma Road, Wall's Well proved to be an important water source to travellers and miners in the desert country. Nearby are located the mineral-rich Gunsight Hills, and the development of claims in the Gunsight, or Meyers, Mining District gave Wall's Well added significance. Close to the well was the tiny Papago village of Kuakatch, or "Kookatsh," meaning "mountain crest." Mexicans called the place "Poza de Fredrico," or "Frederick's Well."¹

Wall's Well figured importantly in the development of the Gunsight mines, for water was piped overland from the source to the workings.² Somebody evidently dubbed the place "Allen," an appellation that lasted only a few years.³ Miners built a smelter at the site, probably at the same time they deepened the well. Later, more Papagos came to Wall's Well and settled. They built some houses, a corral, and a small church.⁴ Naturalist William T. Hornaday described the place during his visit there with Dr. MacDougal's scientific expedition in 1907:

Wall's Well is the most beautiful spot between Tucson and Sonoyta. . . . For a circumference of five hundred feet around the well it is like a Belasco scene in a theatre. . . . In the foreground is the Well itself, carefully penned in with posts and planks to keep out any wandering horse that otherwise might become involved. There is a trough, a rope

1. Irish, "Place Names of Organ Pipe Cactus National Monument"; Hoy, "Frontier Period," no pagination indicated; Lumholtz, *New Trails in Mexico*, p. 386.

2. Irish, "Place Names of Organ Pipe Cactus National Monument"; *Ajo Copper News*, December 28, 1917, cited in Hoy, "Frontier Period," p. 180.

3. See the General Land Office's map, "Territory of Arizona." 1883. G. P. Strum, Principal Draughtsman. Map Collection, University of Arizona Library; and "Rail Road & Township Map of Arizona." 1885. Map Collection, University of Arizona Library.

4. Bryan, *The Papago Country*, p. 368.

and a pail; and the water is fairly good. * * * Wall's Well once was the seat of a serious mining industry, but now it is owned by the rabbits and ravens. Within a long stone-throw of our camp-fire there stood a huge pair of boilers nearly large enough to run a man-of-war. Although now numbered with the has-beens, they are not badly rusted. Surely the hauling of those iron monsters from the railway, sixty-five miles across the desert, was a formidable undertaking; and all for naught. Today they are not even of value as scrap-iron. As they stood there in the open, level and plumb on a base of solid masonry, rising far higher than a man's head and staring dumbly into the desert out of their two big fire-door eyes, they seemed almost like living things, waiting for the relief that never comes. I have heard a rumour that once these boilers pumped water through a two-inch pipe to the Gunsight Mines, five miles away. . . . Near the boilers stood the crumbling ruins of what once was a fine adobe building, undoubtedly the headquarters of the mining company that once operated here. * * * On the knoll above the ruins stood a very good Mexican adobe house, with a rustic veranda of mesquite posts and the usual roof of loose material.⁵

In 1913 a railroad survey completed by the Calumet and Arizona Mining Company, which contemplated a line between Tucson and Ajo, passed near Wall's Well and the Gunsight Mine. The railroad was never built.⁶ Just west of Wall's Well, William G. and Birdie Del Miller settled about 1913. The Millers raised cattle and they erected a long wire fence east of their land to prevent their stock from wandering too near the Papago rancharía a quarter of a mile away. Bill Miller dug two wells at his place and built a windmill to pump the water. The Millers had a ranchhouse and a corral near Wall's Well and they ranged their cattle all through the area.⁷ Another fence erected by the Millers ran from Estes Canyon, west of the Ajos and south of Wall's Well, all the way across Ajo Valley to the Puerto Blanco Mountains near Dripping Springs. The purpose of this barrier was to keep Mexican cattle from the Millers' grazing lands.⁸

During the period before World War I when Mexican political instability manifested itself, the Wall's Well vicinity took on importance when American soldiers camped east of the well near the Miller property. On one occasion some renegade Villistas approached the Miller home and requested a head of beef,

5. *Camp-Fires on Desert and Lava*, pp. 74, 75-76, 77.

6. Myrick, *Railroads of Arizona*, pp. 398-99.

7. Bureau of Land Management survey map, Township 15 South, Range 4 West, Gila and Salt River Meridian, Arizona, 1933. Bureau of Land Management Office, Phoenix, Arizona; Bryan, *The Papago Country*, pp. 331, 344, 368.

8. Hoy, "Frontier Period," no pagination indicated.

which Bill Miller gave them in return for an engraved Mexican sword.⁹ The Millers separated sometime during the 1920s. Bill went to Nogales while Birdie continued to reside at the Wall's Well homestead. She lived alone most of the time until 1936 when she moved to Ajo. The unoccupied Miller home at Wall's Well was destroyed by fire in 1938 or 1939.¹⁰

Despite the fact that Wall's Well lies outside the boundary of Organ Pipe Cactus National Monument, it is integral to the history of the area and should be included in the interpretive effort. While the site is practically inaccessible it nonetheless figures to an extent among themes of Indian occupation, ranching, and mining. Today very little evidence of human existence remains at Wall's Well and the site does not merit nomination to the National Register of Historic Places.

7. Bull Pasture

Bull Pasture is located high in the Ajo Mountains close by the eastern boundary of Organ Pipe Cactus National Monument. Its name is derived from the fact that early ranchers wintered their cattle in the broad basin overlooking Estes Canyon at an altitude of approximately 3,100 feet. The rich and abundant grasses of Bull Pasture kept the stock healthy and a spring and natural rock tanks provided water. Mexicans called the place "Tinajas de los Toros" ("Watering Tanks of the Bulls"), or "Los Portreritos" ("Little Pastures").¹

Bull Pasture has long been the scene of human habitation. The site has bequeathed archeological evidence suggesting extensive use by Indians.² The first recorded use of the area by Americans is that by two men named Hubstader and Powell who raised cattle in the vicinity in the early 1900s and wintered their stock at Bull Pasture. Later, about 1913, William and Birdie Del Miller began utilizing the pasture for some of their horses and bulls, and eventually cattle were kept there. Livestock placed in Bull Pasture had ample grazing land and water and were restricted to the area by the steep natural terrain around the edge of the basin. Only a short stretch of fence was required across the trail leading into the pasture to confine the animals.³ The theory behind wintering cattle in the basin held that by placing bulls with the cattle the resulting calves would be of uniform age.⁴ One disadvantage of Bull Pasture was

9. *Ibid.*, Hoy, "Early Period," pp. 73-74.

10. Hoy, "Frontier Period," p. 223.

1. Irish, "Place Names of Organ Pipe Cactus National Monument"; Hoy, "Frontier Period," p. 223.

2. Irish, "Place Names of Organ Pipe Cactus National Monument."

3. Hoy, "Frontier Period," no pagination indicated. The remains of the fence can still be seen near the rim of the basin. *Ibid.*

4. Gray Interview.

that its area was too small to hold many cattle and could be easily overstocked. The Millers stopped using the basin in about 1925.⁵ Bobby Gray once tried placing his horses there, but the animals did not fare well. Thereafter Gray took them elsewhere.⁶

The site played an interesting and significant part in the border disturbances of the early twentieth century. From about 1915 to 1917 groups representing the different disfavored factions of Mexican politics often crossed the border from Sonoita and hid in Bull Pasture to escape their revolutionary adversaries. Its location high in the mountains, together with the water and plentiful grass it afforded, made Bull Pasture an attractive and secure refuge pending the outcome of events below the border.⁷ In 1915 one group of Villistas were arrested in the basin but were allowed by immigration authorities to remain in the United States.⁸ Nevertheless, the Mexican incursions violated the sanctity of the United States and the Government despatched troops to Alamo Canyon to watch for more Villistas. Later the Arizona National Guard ran frequent patrols of the border near Sonoita. In one instance a Guard unit went up to Bull Pasture only to find that its Mexican occupants had escaped over the sides of the basin by using ropes.

Bull Pasture is located in an ideal setting in which to interpret the historical themes of cattle ranching, and particularly, the border troubles resulting in the occupation of the site by Villista renegades and the consequent attention it received from the United States Army and the Arizona National Guard. Bull Pasture is reached via Ajo Mountain Drive and a steep trail 1.7 miles long leading up to the basin. While accessibility is somewhat restricted, the site nonetheless represents one of the primary local historical features within the monument. Bull Pasture belongs to the Third Order of Significance and should be nominated to the National Register of Historic Places.

8. Other Wells, Springs, and Tanks

The following water sources, while unquestionably vital to the settlement and development of the border country now composing Organ Pipe Cactus National Monument, are individually of marginal historical significance. Taken as a whole, however, they symbolize the ever-present need for water in the hostile desert environment and thereby comprise a significant interpretive element in the history of this region and locality. None of these sites is recommended for nomination to the National Register of Historic Places.

a. Pozo Salado (Salt Well)

This well, placed about one-half mile from the international boundary in the southwestern part of the monument, was dug by Ralph and Bobby Gray, Jack

5. Irish, "Place Names of Organ Pipe Cactus National Monument."

6. Gray Interview.

7. Hoy, "Early Period," p. 70.

8. Bryan, *The Papago Country*, pp. 358-59.

Davis, and a man named Baker in 1942. Bobby Gray installed the windmill. Pozo Salado was installed by the Grays to furnish water for their livestock in the area.¹ Today the site contains the well, a concrete watering trough (on which is scratched the date "11/2/42"), and a corral. The trough is located in the corral, which consists of three enclosures--the watering pen, a holding pen, and a loading pen with chute. The corral is constructed of railroad ties, barbed wire, and heavy-gauge chickenwire. East of it is a wide wash where a line camp, now in ruins, once stood.² Pozo Salado Well, so named for the brackish quality of its water, is located next to an old dirt road leading to the site from Puerto Blanco Drive. It is presently accessible to the public.

b. Aguajita Spring

About four miles west of Pozo Salado and one mile east of Quitobaquito along the Puerto Blanco Drive is Aguajita Spring, near the Mexican border. "Aguajita" means "small flowing water" in Spanish, and the site has long served as a watering place for wild animals and grazing cattle. Mikul G. Levy opened a small store here, probably in the 1890s.¹ Stretching north from the spring is the broad Aguajita Wash. Around 1920 Mr. W. T. Oldham operated a store slightly northeast of the wash, selling such articles as coffee, flour, beans, and tobacco.² Still later, in 1936 or 1937, Alfred Jenkins erected a one-room shack along the wash. Jenkins dug a well, installed a centrifugal pump, and irrigated a patch of ground where he grew potatoes. Another man, Elmer Montgomery, also settled nearby and dug a well. These men stayed in the area for several years reportedly searching for lost Spanish treasure.³

In the 1920s the Gray family began ranging their cattle around Aguajita Spring. They built the mesquite corral that stands today in order to trap their livestock. Bobby Gray recalled that Aguajita once harbored literally hundreds of wild burros, making it "impossible to sleep there."⁴

c. Burro Spring

Burro Spring is located about one-half mile northwest of Quitobaquito. Named for the profusion of wild burros that once inhabited the country, the slow-running spring has provided water for desert animals and for cattle grazing

1. Gray Interview; Irish, "Place Names of Organ Pipe Cactus National Monument."

2. Greene, Field Notes.

1. Irish, "Place Names of Organ Pipe Cactus National Monument."

2. Hoy, "Frontier Period," no pagination indicated.

3. *Ibid.*

4. Gray Interview.

in the vicinity.¹ There is no development at Burro Spring and the site is inaccessible to tourists.

d. Williams Spring

Situated slightly north of Burro Spring, this water source has seen some development in the past and doubtless prehistoric Indians got water there. The site is named after Frank Williams, who irrigated a small alfalfa field with water from the spring. It is also known as Rincon Spring.¹ In 1916 three miners--J. N. Meadows, R. Wright, and William Keenan--worked claims nearby and used the water. Williams purchased their rights and erected a burro trap near the spring. Lon Blankenship ranged some of his cattle nearby and they watered at Williams Spring until 1920, when Robert Louis Gray bought Blankenship's water rights. The Grays have used the spring for their cattle ever since.² This site is inaccessible to the public.

e. Hocker Well

Hocker Well is located a little over two miles west of Quitobaquito and lies about 100 yards from the Mexican border. The well is named for Conway ("Ike") Hocker, who was cattle foreman for Tom Childs and tended some of Childs's stock in the area. The name is linked to Hocker because of his association with the well rather than because he dug it. Hocker Well was hand dug by a Mexican from Gila Bend, Arizona, who was hired by Childs for the task. The hole is only about 20 feet deep.¹ Hocker lived there for a time in the mid-1920s and built a jacal-ramada structure at the site. Since the 1920s the Gray family have used the water for their stock.²

Today Hocker Well consists of an ell-shaped corral with a holding pen and loading chute, and two watering troughs. The well proper lies outside the corral. Thirty yards south-southeast from the corral is Ike Hocker's old jacal, made mostly of mesquite, palo verde, and saguaro ribs. It is in dilapidated condition, but is somewhat unique because of its scavenger-type composition. Pieces of metal pipe and rail are also used to support the structure, while its walls have been constructed from a dismantled wagon. An unusual feature of this jacal is a rock fireplace made of decomposed granite, doubtless placed here to compensate for the exposed location and the whipping, cold winds present during the winter.³ Bobby Gray reported that the fireplace was built in the early

1. Irish, "Place Names of Organ Pipe Cactus National Monument."

1. Hoy, "Administrative," p. 69c.

2. Irish, "Place Names of Organ Pipe Cactus National Monument."

1. Gray Interview.

2. Irish, "Place Names of Organ Pipe Cactus National Monument"; Hoy, "Frontier Period," no pagination indicated.

3. Greene, Field Notes.

1920s by a representative of the New Cornelia Mining Company at Ajo, which intended to lay a railroad through to Rocky Point on the Gulf of California.⁴ Hocker Well lies off the established Park Service routes and is not generally accessible to monument visitors. It is recommended that the jacal not be demolished, but allowed to deteriorate naturally, and that the fireplace remain after the jacal is gone.

f. Corner Well

Corner Well is located on the Cabeza Prieta Game Refuge just outside the extreme southwestern boundary of Organ Pipe Cactus National Monument. However, access to the site is through monument land and its history is closely associated with related sites on the monument. Corner Well was drilled in August 1949 by James Havens for use by his cattle. The well is also called "Needmore," either because the workers who built it always needed something more in the way of money or material to complete it, or because the cattle always needed more water than the well could furnish.¹ A line shack of corrugated sheet iron and two-by-fours was erected near the well. In addition there was a corral and a windmill.² Havens lost the well site when the land was condemned and withdrawn for use as a gunnery range in 1951. Grazing was terminated four years later and Havens was compensated for his loss.³ Some of the Gray livestock crossed through the monument fence and watered at Corner Well. Today nothing remains of the improvements at the site, the shack, corral, and windmill having been removed long ago by persons unknown.⁴

g. Cipriano Well

This well was originally hand dug in the late nineteenth century by Cipriano Ortega, for whom it was named (it is also called, simply, "El Pozo," "The Well"). Ortega lived in the vicinity for awhile but soon moved away. Later some Areneño Indians lived there, including Jose Juan Orosco of Quitobaquito. Jose Juan's son Jim was born at Cipriano Well about 1905.¹ Located about four miles north

4. Gray Interview.

1. Irish, "Place Names of Organ Pipe Cactus National Monument"; Hoy, "Administrative," p. 49.
2. Hoy, "Frontier Period," no pagination indicated.
3. Hoy, "Administrative," pp. 49, 50; Irish, "Place Names of Organ Pipe Cactus National Monument."
4. Hoy, "Frontier Period," no pagination indicated.

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1. Irish, "Place Names of Organ Pipe Cactus National Monument"; Hoy, "Administrative," p. 138.

of Quitobaquito, the well was originally about 30 feet deep,² but has since been deepened. The Indians living at the well moved away, mostly back to Quitobaquito, following an influenza epidemic that struck them at Cipriano Well.³ In 1916 the site became the base camp for three Americans who were engaged in the hide business. These men daily crossed into Mexico and killed as many burros as possible, skinned them, and brought the hides into the United States for sale. This enterprise lasted for six weeks.⁴ When Kirk Bryan visited the place in 1917 he found two wells there, one 57 feet deep with "slightly brackish water," the other 35 feet deep.⁵ Today the area is vacant, with only the remains of a mesquite fence indicative of past improvements. Cipriano Well is accessible over a minimal maintenance road.

h. Pozo Nuevo

Pozo Nuevo, or Jose Juan's Well, was dug by the Sand Papago Indian Jose Juan Orosco in 1910. Orosco used the well for his cattle, pumping the water by hand-turned windlass and pouring it into a watering trough. Pozo Nuevo, possibly the oldest hand dug well within the monument, is located one and one-half miles northwest of Cipriano Well and about four miles northwest of Cipriano Junction along the Puerto Blanco Drive in Organ Pipe Cactus National Monument.¹ Jim Orosco inherited the well upon his father's death in 1946, and in 1952 he sold the place to Henry Gray.² Gray used the well as a line camp for tending his cattle. In 1953 Henry tried unsuccessfully to redrill Pozo Nuevo, but it caved in and he drilled another well 60 feet to the northwest. He also erected a windmill to pump the water to the surface.³ Today the well is dry.

There are several improvements at Pozo Nuevo. One is a single room line camp, about 12 feet by 12 feet, built of railroad ties with a sheet metal exterior and a roof of boards and saguaro ribs piled with earth. There is a four-compartment corral made of railroad ties, planks, mesquite posts, and various other materials. In one corner of the corral is a ramada constructed of an iron

2. Haley, *Jeff Milton*, p. 158. Haley relates the story of how Jeff Milton, on visiting Cipriano Well, could not persuade his pack mule to drink from a wet rawhide bucket in the well. "So Jeff made a hollow in the sand, mashed his slicker into it for an improvised trough, drew water in the little pail he carried on the pack, and she drank to satisfaction." *Ibid.*

3. Gray Interview.

4. Bryan, *The Papago Country*, p. 426.

5. Hoy, "Early Period," p. 29; Bryan, *The Papago Country*, p. 345.

1. Irish, "Place Names of Organ Pipe Cactus National Monument"; Appleman and Jones, *Blankenship Ranch*, p. 19.

2. Hoy, "Administrative," p. 70.

3. *Ibid.*; Appleman and Jones, *Blankenship Ranch*, pp. 19-20.

pipe, a telephone pole, and saguaro ribs. The windmill once operated the newer well, and water pumped by it was emptied into a watering tank where the cattle obtained it.⁴ Pozo Nuevo is situated along the old road leading to Bates Well in the northern part of the monument. It lies off the routes established by the National Park Service and is therefore not easily accessible for visitors. It is recommended that the corral be allowed to deteriorate naturally and not be demolished.

i. Bonita Well

Bonita Well was dug in the 1930s by two men, H. Jenkins and Robert Montgomery, who were working for Henry Gray. Local prospectors aided Gray in determining the potential for striking water at the site. "Bonita" means "pretty" in Spanish, and the name was probably given to the well by Henry Gray.¹ The well is located on the eastern side of a large wash. Improvements at Bonita Well comprise a corral and a line shack. The corral has two enclosures; one contains a watering trough, the other is a holding pen with a loading chute. The corral is built in the traditional border manner of palo verde and mesquite, with barbed wire strands spaced about six inches apart placed all around the enclosure. Corners of the corral are made of railroad ties placed upright, as are the loading chute and the holding pen. On the westernmost corral the ties are arranged horizontally with the ground. East of the well and across the road is the line camp, a one-room shanty of wood construction with a cement floor and a roof of sheet metal. It has a small ramada on the outside.² Bonita Well is located along the Puerto Blanco Drive, approximately five miles northeast of Quitobaquito, and between the Cipriano Hills to the northwest and the Puerto Blanco Mountains to the east.

j. Dripping Springs

Dripping Springs is located in the northern part of the Puerto Blanco Mountains. Long the scene of various Indian habitations in prehistoric times, Dripping Springs represents one of the finest archeological sites within Organ Pipe Cactus National Monument. Numerous overhanging rock shelters with smoke-blackened ceilings attest to native occupation in ages past. The place is a natural water source, its name derived from the nature of the spring--it drips water from the roof and side of a cave, or grotto, into a pool on the floor near the entrance. Papago Indians used Dripping Springs frequently during their treks through the region collecting cactus fruit. Travelers en route to Sonoita from Ajo got water at the springs, and bootleggers reportedly frequented the site during Prohibition. Around 1913 William G. Miller dug a well slightly northeast of Dripping Springs to water his cattle that roamed nearby.¹ He and

4. Appleman and Jones, *Blankenship Ranch*, pp. 46-47.

1. Gray Interview; Irish, "Place Names of Organ Pipe Cactus National Monument."

2. Greene, Field Notes.

1. Irish, "Place Names of Organ Pipe Cactus National Monument."

his wife settled at the location for a short time. Miller screened the springs to keep bees from getting in the water. Later John Cameron ran a pipe from Dripping Springs down the hillside to a watering trough for his livestock.² One of the truly beautiful sections of the monument, the Dripping Springs area is open to the public. However, the springs themselves are located some distance from the Puerto Blanco Drive and a visit to them requires a strenuous climb over rocky terrain, making them relatively inaccessible to the average visitor.

k. Red Tanks Well

This well was dug about 1932, probably by Ralph Gray, for use by Gray family cattle ranging in the area. It is named for the adjacent Red Tail Tanks, natural rock receptacles. Water was brought to the surface of the well by a hand-operated windlass. Red Tanks Well is no longer in use.¹ It is located beside an old jeep trail (presently closed) a short distance south of Puerto Blanco Drive and three miles from the monument visitor center. The site is not accessible to tourists.

l. Acuna Well

Acuna Well was dug in the early 1900s by unknown persons, probably to provide water for cattle in the area. It is presumably named for the Acuna Valley where it is located and where the acuna cactus thrives. The well, 43 feet deep, is no longer in use.¹ The site is inaccessible to the public.

m. Cherioni Well

Cherioni Well is situated approximately 5-1/2 miles southeast from Bates Well, in the north-central part of Organ Pipe Cactus National Monument. It is located slightly northeast of Cherioni Wash, the arroyo from which it derived its name. The well was dug sometime around 1915 by Reuben Daniels, who envisioned it as linking the rangeland near Alamo Canyon with that around Bates Well.¹ Named for the cherioni, or scapberry, trees growing nearby that supposedly indicated the presence of water near the surface of the ground, the well nevertheless ran dry in its second year, although it retained water after floods in the Cherioni Wash.²

During the early 1930s Elmer Montgomery moved to Cherioni Well with his family. Montgomery put in another well ten yards from the old one, built a

2. Hoy, "Frontier Period," p. 222. The bees are still there, as this writer can attest.

1. Hoy, "Frontier Period," p. 222.

1. Irish, "Place Names of Organ Pipe Cactus National Monument."

1. Irish, "Place Names of Organ Pipe Cactus National Monument."

2. Hoy, "Frontier Period," no pagination indicated.

small home of mesquite and ocotillo with a fireplace, and lived there for two years. The second well was actually dug by John Cameron, and a concrete watering trough was erected by it. Cherioni Well, or simply "Cherion" to the old-timers, for a short time served as a crossroads in the desert for travellers passing through to Sonoita, Bates Well, or the Growler Mine.³ Sometimes known as Daniels Well for its early developer, the Cherioni site is remote and therefore inaccessible to the public.

n. Armenta Well

In 1930 Abraham Armenta settled with his family near the Kuakatch Wash in what is presently the north-central part of the monument. Armenta dug a 40-foot well, built an adobe house, and farmed the land, which covered 320 acres. At "Armenta's Place," as it came to be called, he raised corn, beans, melons, and other crops to sell at the mines in Ajo. In 1935, shortly before Armenta left the area, another, deeper, well was drilled three-quarters of a mile south of the first one.¹

Today two buildings remain on the site. One is a jacal made of ocotillo with a dirt roof supported by palo verde or mesquite logs. This structure is leaning heavily southward and will soon collapse. The building next to the jacal is a residence made of firebrick. The walls inside have been fashioned from discarded wooden dynamite cases, probably taken from the mines at Ajo. Many railroad ties have been used in the construction of this metal-roofed, two-room building. Armenta's Well is located about 50 yards from the buildings. Nearby is a small corral built of railroad ties and chicken wire that probably was used for goats. A chicken coop or storage shed stands east of the corral and is constructed of scrap sheet iron, palo verde, and ocotillo.² Armenta's Place is not easily accessible to visitors at Organ Pipe Cactus National Monument.

o. Alamo Canyon

Alamo Canyon (Spanish for "poplar," or "cottonwood") in the Ajo Mountains represents another long-inhabited site in Organ Pipe Cactus National Monument. Early in the twentieth century a village of Papago Indians lived there. Two men named Hubstader and Powell prospected the area and in 1913 sold their holdings to William G. and Birdie Del Miller, who built an adobe house there the following year. The Millers had Reuben Daniels dig a well for them at about that time.¹ In 1917 Kirk Bryan stopped at the Miller place and noted the presence of

3. *Ibid.* Details of the Montgomery house at Cherioni Well appear in *ibid.*, p. 274.

1. Gray Interview; Hoy, "Administrative," no pagination indicated; Irish, "Place Names of Organ Pipe Cactus National Monument."

2. Greene, Field Notes.

1. Hoy, "Frontier Period," pp. 222-23; Irish, "Place Names of Organ Pipe Cactus National Monument."

"two dug wells and a windmill."² In 1937, after the Millers had left, the Gray family acquired rights to the area and utilized the Alamo Well for the hundreds of cattle they kept there. Jack Gray built a small brick home next to the Millers' old adobe place. Still later, Ralph Gray and his family lived "in the Alamo."³

Present development at Alamo Canyon includes the old adobe Miller place and the brick house erected by Jack Gray. The well is located several hundred yards above the residence, adjacent to a stone corral. The National Park Service maintains a public campground at the mouth of the canyon, but the area of the well and residence is not easily accessible for park visitors.⁴

p. Wild Horse Tank

This natural *tinaja* is located in the Diablo Mountains in the eastern part of the monument, close to the Ajo Mountain Drive. It is a rock tank situated on a ledge overlooking a prehistoric Indian camp site. Used by cattlemen early in the twentieth century, Wild Horse Tank actually consists of two tanks, an upper and a lower one. The lowest measures about 51 feet long and 30 feet wide, with a variable depth. The higher tank is smaller, running 8 feet in length by 3 feet in width, and has a depth of about 15 inches. Lon Blankenship used Wild Horse Tank for his cattle, as did the Gray family after 1919.¹

During the 1920s the Wild Horse Tank area was used by bootleggers who operated a still under the overhanging ledge. Three men, Jack Ricks, W. G. ("Boots") Burnham, and Newton Meadows made corn liquor at the site and peddled it in Ajo. The presence today of barrel staves and other moonshiners' paraphernalia commemorate this phase of the monument's history.² At one time trails from the tank ran north towards Alamo Canyon and east to Bull Pasture Spring.³ In the 1930s Henry Gray built a buttressed concrete lip on the edge of the overhang to increase the holding capacity of the lower pool. Wandering live-

2. *The Papago Country*, p. 344.

3. Irish, "Place Names of Organ Pipe Cactus National Monument"; Gray Interview.

4. Greene, Field Notes.

1. Irish, "Place Names of Organ Pipe Cactus National Monument"; Greene, Field Notes; Appleman and Jones, *Blankenship Ranch*, p. 25.

2. Gray Interview; Cook, "Documentation of the Arizona Papageria," p. 295. Other bootlegger sites were located at nearby Diablo Tank, at a *tinaja* known as "Window Rock" or "Jackson Hole" northwest of Dripping Springs, at the abandoned Blue Bird Mine just outside the north boundary of the monument, and in a small cave near Kino Peak. Hoy, "Frontier Period," no pagination indicated.

3. Bryan, *The Papago Country*, p. 425.

stock were sometimes trapped at the site by a fence that crossed the narrow access to the tank.⁴ Despite the proximity of Wild Horse Tank to the monument tour road, the site remains unimproved and is generally inaccessible to visitors. An interpretive marker placed along the roadside might describe the site's relationship to the colorful Prohibition era.

q. Estes Well

Estes Canyon is located in the Ajo Mountains a short distance east of Wild Horse tank. It is named for "Old Man" Estes, reportedly an army scout during the Apache campaigns, who settled near the mouth of the canyon and raised goats and a few cattle there. Little about Estes is known, although evidently he and a man named Dalton lived in the area and dug a well near their homestead. Nothing remains today at the site, which is inaccessible to visitors.¹

r. Cement Tank

Cement Tank is located one and one-half miles east of Diaz Peak near the western slope of the Ajo Mountains. The site consists of a large cement dam built across an arroyo to catch water. Cement Tank was erected by Lon Blankenship sometime before 1919 to collect rainwater for his cattle. Blankenship placed a pipe at the sand bottom of the dam that permitted settling water, otherwise lost, to trickle through and accumulate in small pools outside the tank. Since 1919 Cement Tank has occasionally been used by the Gray partnership, but today it is filled with accumulated sand and gravel.¹

s. Palo Verde Camp

This line camp site is located in what is now the northwestern corner of the monument. Named for a palo verde tree growing in the vicinity, the camp was used by cattlemen during the early part of the twentieth century and is now abandoned.¹ The site is not accessible to visitors.

B. Mines and Prospects

Much of the human occupation and activity at Organ Pipe Cactus National Monument has been concerned with the location and development of mineral wealth. Unlike ranching, mining produced very few long-term commitments to the region.

4. Greene, Field Notes; Hoy, "Administrative," p. 82a; Appleman and Jones, *Blankenship Ranch*, p. 25.

1. Irish, "Place Names of Organ Pipe Cactus National Monument"; Hoy, "Frontier Period," no pagination indicated.

1. Irish, "Place Names of Organ Pipe Cactus National Monument"; Hoy, "Frontier Period," no pagination indicated; Appleman and Jones, *Blankenship Ranch*, p. 24.

1. "Irish, "Place Names of Organ Pipe Cactus National Monument."

It is profoundly evidenced within the monument, however, by the presence of a great many prospect holes. Few sustained mining operations have existed in this immediate locale, mainly because potential for sizeable quantities of minerals has never been determined. Instead, mining has proved to be one of the principal obstacles to the successful administration of this monument since 1941 when prohibitive legislation was repealed. Recent legislation restricting the mining enterprise will likely ameliorate this situation and will hopefully remove entirely the threat of mining from within the monument area.

1. Victoria Mine

Of all the mining properties within Organ Pipe Cactus National Monument, the Victoria Mine is one of the most singularly successful and most historic. This silver, lead, and gold producer is in the Montezuma District and is located four miles above the international boundary on the eastern flank of the Sonoyta Mountains. It can be reached via the jeep trail running north from Puerto Blanco Drive. While the earliest history of Victoria Mine is obscure, the site nevertheless possesses a colorful past dating from the period of first American settlement in the border region. One account holds that an American married to a Cahuilla Indian woman discovered the surface silver vein sometime around 1880. Another version is that the mine was known long ago to the Spanish. As early as the 1870s Mexicans supposedly worked the site and hauled its ore across the border for processing, an account agreeable with its known ownership by Cipriano Ortega, an outlaw-turned-entrepreneur who acquired it in about 1880. Ortega called the mine "La Americana," probably because of its position north of the boundary. He worked it for about fifteen years and reportedly extracted considerable amounts of silver ore, which he hauled to Santo Domingo, seven miles away, and crushed with a burro-driven arrastra. Then he transported the bullion south to Hermosillo, Sonora, or north to Yuma, Arizona.¹

Sometime in the late 1890s Ortega ceased operations at La Americana, either because he feared American involvement at the site or because he had exhausted the surface vein and lacked the technology to go deeper. In any event, Ortega removed the heavy support timbers and the mine shaft collapsed.² La Americana was in this condition in 1899, when Mikul G. Levy, who lived in the area of Santo Domingo, decided to buy the property. Levy's tenure as owner of the mine spanned four decades and it is association with it that has been most successfully documented. Levy dropped the name, La Americana, and renamed the mine Victoria, after Victoria Leon, the wife of Jose Leon who minded Levy's store at Quitobaquito.³

1. Appleman and Jones, *Victoria Mine*, pp. 3, 4; Irish, "Place Names of Organ Pipe Cactus National Monument"; Butler and Lewis, "Mineralization in the Organ Pipe Cactus National Monument," p. 27; Hoy, "Frontier Period," no pagination indicated.

2. Appleman and Jones, *Victoria Mine*, p. 8.

3. *Ibid.*, p. 11; Irish, "Place Names of Organ Pipe Cactus National Monument."

Levy located his claim at Victoria in January 1899. He reopened the shaft Ortega had closed and prepared to extend it to a depth of 500 feet.⁴ Levy pursued this objective for several years, during which time he erected a stone building at the mine and operated a store there.⁵ Possibly he simply relocated his business from Quitobaquito, and it is likely that Jose Leon and his wife joined Levy at the Victoria.

Levy never reached the 500-foot depth he sought at the mine, for shortly before 1910 he encountered water at 312 feet. Lacking effective pumping equipment and short on capital, he temporarily abandoned the site and concentrated elsewhere in the vicinity.⁶ He filed an amended claim to establish Victoria Mine No. 2, Victoria Mine No. 3, and Mexicana Mine. In an effort to meet development costs, Levy sold shares of his interest in the Victoria, and in 1914, he joined with Jeff Milton and Louis Carl in recording the Monte Christo Mine as an extension of the Victoria. Next year he filed a claim for Victoria Mine No. 4,⁷ but none of these developments netted Levy much profit and they remained dormant much of the time.

About 1924 Levy's Victoria holdings were incorporated in the Victoria Mining and Smelting Company, a development concern headed by Harry Kliban of Ajo. The company held 22-1/2 claims, 12-1/2 of them located at the original Victoria site. Levy continued to maintain half interest in the Victoria, and his co-owners were Samuel Keil and Judge W. E. Ryan, both of Phoenix.⁸ Development by the mining company focused mainly on Victoria No. 2, and a record of property at the mine in 1925 indicates that substantive operations took place there:

- 1 Boarding House and Kitchen
- 1 Bunk House
- 1 Blacksmith Shop
- 1 Store House
- 2 Adobe Buildings
- 1 16' x 20' Tent and Frame Building
- 1 Corral
- 1 Cement Dipper (for cattle)⁹

4. Appleman and Jones, *Victoria Mine*, p. 9.

5. Hoy, "Frontier Period," no pagination indicated.

6. Appleman and Jones, *Victoria Mine*, p. 12.

7. *Ibid.*, pp. 13-14. An item in *The Mining Journal*, February 15, 1934, stated that Levy extracted the last carload of ore from the Victoria in 1915. It came from the 300-foot level of the mine, consisted of 30,545 pounds, and "gave net smelter returns of \$167.48 per ton."

8. *The Mining Journal*, February 15, 1934.

9. Appleman and Jones, *Victoria Mine*, pp. 15, 23-24.

Water, evidently hauled from Quitobaquito or from the Sonoyta River, was kept in a large cistern at the work site.¹⁰ Despite the activity at the Victoria, the mine produced little in the way of valuable ore.¹¹

During the 1930s Levy and his business associates leased the Victoria to independent developers. In 1931 a man named C. T. McIntyre was at the Victoria and erected a small mill there to crush his extracted ore.¹² Three years later Parker L. Woodman, of Phoenix, obtained a lease on the property, cleared the shaft to the 300-foot level, and installed ventilating equipment.¹³ Then in 1935 the Victoria Mining and Smelting Company leased the development to a group of persons who also acquired an option to buy it for \$50,000. The lessees were somewhat successful in sinking the shaft beyond the water level and removing an unknown amount of ore. But inadequate pumping equipment forced them to abandon the scene in 1936. Three years later Levy hired a caretaker to watch the mine and it was not worked again until after his death in 1941.¹⁴

Numerous claims have been located at the Victoria since the early 1940s. In 1941, the year Levy died, J. R. Hedworth located four there. In 1955 five men--A. C. Netherlin, T. F. Larremore, R. C. Chapman, Milton Fraf, and Russel T. Hall--recorded Victoria Claim No. 1, followed in 1956 by Claims Nos. 2, 3, 4, 5, 6, and 7. Two years later Netherlin, Larremore, and Henry Jarvis added yet another,¹⁵ and by 1961 there was a claim at Victoria being mined by Jarvis, Samuel Hocker, and Jack Worsham. These men extracted one carload of silica from the site but made a negligible profit.¹⁶

Activity at the Victoria continued intermittently through the late 1960s and into the 1970s. Although little wealth was derived from the site, the aspirations of various individuals armed with a claim and a special use permit has contributed to the despoliation of the environment around Victoria. As late as 1974, 1975, and 1976 claims have been located in the immediate area of the mine.¹⁷ All in all, the Victoria has not produced greatly. Probably Cipriano

10. *Ibid.*, p. 24.

11. Irish, "Place Names of Organ Pipe Cactus National Monument."

12. *The Mining Journal*, January 30, 1932, p. 20.

13. *Ibid.*, February 15, 1934; May 15, 1934.

14. Appleman and Jones, *Victoria Mine*, pp. 18-19; Hoy, "Frontier Period," no pagination indicated.

15. Appleman and Jones, *Victoria Mine*, p. 20; Irish, "Place Names of Organ Pipe Cactus National Monument."

16. Irish, "Place Names of Organ Pipe Cactus National Monument."

17. *Ibid.*; "Index to Mining Records. Name of Mine." Office of Pima County Recorder, Tucson, Arizona. Vol. 16.

Ortega benefited most from the mine. Mikul Levy managed only about \$30,000 in ore during his tenure of ownership and interest there, while subsequent claimants have realized but approximately \$10,000.¹⁸

Victoria Mine represents the oldest known example of mining activity within the national monument and constitutes one of its major historical properties. Located about three miles southwest of the visitors center, the site is presently inaccessible to the public. The surviving structures at Victoria Mine today include the dilapidated rectangular stone building that once was Levy's store, probably built around 1900. The roof of the structure is now gone, but it was of sheet iron. The building measures roughly 21 feet by 16 feet. Its walls are 30 inches thick and are made of granite with mud and gravel chinking. Originally the structure stood about 6 feet in height, but 2 more feet were added at the front to allow the placement of a flat, sloping roof.¹⁹

Other tangible remains at Victoria Mine consist of a rock lean-to shelter, the concrete cistern, some railroad ties where once carts operated on a track running to a tailings dump, a stone stairway, a few headframe timbers, a concrete winch base, and a large shaft hole recently covered by the National Park Service. There are many prospects scattered throughout the area.²⁰ This evidence of its productive past, besides its physical proximity to Puerto Blanco Drive, makes Victoria Mine the logical place to describe the mining history of the Organ Pipe region. Once present claims are invalidated the site should be preserved and the stone building preferably restored as much as possible to its original condition. When the road leading to Victoria Mine is improved and informative interpretive markers are placed, the site will offer an interesting and meaningful diversionary trip for park visitors. Victoria Mine belongs to the Second Order of Significance and deserves nomination to the National Register of Historic Places.

2. Milton Mine

The Milton Mine is located four miles northwest of the Victoria in the south-central part of Organ Pipe Cactus National Monument. It is 4-1/2 miles above the Mexican boundary. Situated in the southernmost fringe of the Puerto Blanco Mountains, the Milton Mine has produced gold and copper ore in very small quantities.¹ The mine was named after its discoverer, Jefferson Davis Milton, who located it prior to 1911 while "hunting Chinks" in the border country.²

18. Appleman and Jones, *Victoria Mine*, p. 12.

19. *Ibid.*, pp. 25-26, 27.

20. *Ibid.*, p. 25; Greene, Field Notes.

1. Butler and Lewis, "Mineralization in the Organ Pipe Cactus National Monument," p. 27.

2. Irish, "Place Names of Organ Pipe Cactus National Monument." The 1911 date is based upon claims filed for the site at that time by Milton, W. S. (continued)

A true frontiersman in the strictest sense of the term, Milton was long associated with the country now composing the national monument. He was born in Florida in 1861 and as a young man served with the Texas Rangers. He later took a position with the U.S. Customs Service and was assigned to Arizona where he patrolled the Mexican border between Nogales and Yuma. By the late 1880s Milton was at Sonoita and Quitobaquito and had become very familiar with the border region in that vicinity. Sonoita held particular advantages for Chinese and Japanese aliens who sought entry into the United States during this period of restricted immigration. Milton, first as a customs officer and later as an immigration agent, roamed the desert apprehending these illegal entrants and forestalling the efforts of smugglers to get the orientals into the United States.³ Milton's knowledge of the borderlands gained him the position of guide with the MacDougal Expedition in 1907, and one member of that party left the following impression of him:

Mr. Milton is a man of large size, commanding presence, cheerful disposition and restless energy. In camp and on the trail his good humour is almost constant. . . . Our friend "Jeff" is a man of many adventures--with a possibility of more to come. As express messenger in a country of train robbers, and in other capacities also, he has seen some stirring times. In a famous battle with train-robbers who attempted to clean out a Wells-Fargo Express car that was being guarded by Mr. Milton, he received a 45-calibre rifle ball diagonally through his left arm, which cut out a three-inch section from the middle of the humerus, forever. That arm is of course distinctly shorter than its mate, and although in active service, its strength has been seriously impaired.⁴

Milton was a well-known figure in the area now embraced by the monument until 1932 when he retired to Tucson. He died there in 1947.⁵

Milton prospected at various places that he thought might harbor potential wealth. He located several claims in Mexico, some of which later proved successful for others. It was therefore natural for him to file a claim in 1911 on the prospective site he discovered north of the international line. With his

2. (Continued) Sturgis, and George Webb. Roy E. Appleman and Russell Jones, *The Milton Mine. Historic Structures Report Parts I and II. Organ Pipe Cactus National Monument, Arizona* (Washington: National Park Service Office of Archeology and Historic Preservation, 1969), p. 14. Wilton E. Hoy established 1904 as the approximate time of discovery. "Early Period," p. 63.

3. Appleman and Jones, *Milton Mine*, pp. 15-16, 18-19, 20; Hoy, "Early Period," p. 60.

4. Hornaday, *Camp-Fires on Desert and Lava*, p. 99. For Milton's biography, see Haley, *Jeff Milton*.

5. Appleman and Jones, *Milton Mine*, pp. 15, 22.

companions, Milton designated the location the Monadnock Claims.⁶ In 1914 Milton, Sturgis, and Webb relocated the claims and added two others, calling them Cimerone Nos. 1, 2, 3, 4, and 5.⁷ Work on these was delayed until 1917 when Mr. W. F. Schoonmaker, who had taken over the claims, extracted ten car-loads of copper ore that was hauled to Ajo and shipped to Douglas, Arizona, for smelting.⁸ In 1920 Schoonmaker recorded additional claims at the site and presumably worked them to some extent.⁹

Activity at the mine seems to have lapsed from the early 1920s to the 1940s. In 1946 it was under control of the associated Mining and Milling Company, while in the following year an individual named Paul Gatlin held claims on the old Milton site.¹⁰ But production from the mine remained minimal. In 1953 and 1954 Charles Anderson worked the area and evidently extracted some ore, but the amount is unknown. The next substantive operation occurred in 1960 when three men--Henry Jarvis, Jack Worsham, and Samuel Hocker--tried to remove the loose ore from the area, without realizing much financial success.¹¹ These men attempted to erect a small house near the mine but were thwarted by National Park Service refusal to permit the development. They did build a concrete leaching tank at the site.¹² Despite the largely negative results achieved at the Milton Mine, the site drew continued attention. As late as 1966 the mine was claimed by C. A. Withers and Jim Gobouda who renamed it, along with their adjacent claims, the Copper Giant.¹³ A giant in production it has yet to be.

Milton Mine today possesses some material evidence of its past. The site is a surface mine and there is an open cut approximately 300 feet long in a crescent shape that contains some loose azurite copper ore. The cut is about 30 feet deep and shows indications of recent activity. Fifty feet from the trench

6. *Ibid.*, pp. 5, 18. The "Index to Mining Record. Name of Mine." indicates that claims were recorded in 1911 for Monadnock Nos. 1, 6, and 7. Office of Pima County Recorder, Tucson. Vol. 6.

7. Appleman and Jones, *Milton Mine*, p. 6; "Index to Mining Record. Name of Mine." Office of Pima County Recorder, Tucson. Vol. 6. These claims were apparently relocated and augmented by others, for the "Index to Mining Record," Vol. 8, shows claims filed for "Cimarron Nos. 1-23" in 1920. Although the spelling varies, it seems that these claims were all concentrated at the Milton site.

8. Appleman and Jones, *Milton Mine*, pp. 6-7.

9. *Ibid.*, pp. 8-9.

10. *Ibid.*, pp. 9-10.

11. *Ibid.*, pp. 10-12.

12. *Ibid.*, pp. 12-13; Hoy, "Administrative," p. 128.

13. Appleman and Jones, *Milton Mine*, p. 13.

are the dump ramp, platform, and tippie made of timbers, which facilitated the loading of extracted ore onto trucks for transport to Ajo. The tippie is built of rough lumber of variable dimensions. Nearby is a concrete leaching vat measuring 14 feet long by 12 feet wide by 2-1/2 feet deep. This was used to precipitate the copper oxide from the ore by means of a mixture of sulphuric acid and water. There is also an explosives locker, a small excavated pit lined with timbers used to store dynamite and similar blasting equipment. Other excavations in the area comprise a test shaft drilled vertically into the ore to find the depth of the principal ore body, and another such shaft that was only barely started.¹⁴

The overall significance of Milton Mine is difficult to assess. It never produced much and its history was never as far-reaching as that of the Victoria Mine. Indeed, the evidence suggests that the site was never officially called the Milton Mine; rather, it went by a number of names dependent on the caprice of the particular owner at a given time. Moreover, the site was never very active--the chief periods of interest in the location occurred sporadically from 1917 into the 1960s--and it appears probable that Milton himself never worked the site intensively. Because of its local impact and its exemplification of this low-budget form of surface imining the Milton Mine should be nominated to the National Register of Historic Places under the Third Order of Significance. However, its restricted accessibility, owing to current private claims, and its tenuous human and historical associations recommend against an active, on-site interpretive effort. The story of the Milton Mine and of surface mining should be told, but this might be accomplished away from the site.

3. Growler Mine and Mining District

Growler Mine represents one of the most intensely worked copper areas within the national monument. Located west of Growler Pass and Bates Wall, in the southern extremity of the Growler Mountains, this mine was named by Frederick Wall for his friend John Growler sometime in the late 1880s. Wall was a well-known prospector and had frequented the area of southern Arizona since at least 1874. Virtually nothing is known about John Growler for whom the mine, pass, and mountains are named. Archeological findings indicate that the Growler area has been intermittently inhabited for centuries by Indians from prehistoric times through the present Papago occupation.¹ Copper deposits at the mine site have primarily been located in the sedimentary limestone rock rather than in the underlying granite.²

14. *Ibid.*, pp. 1, 22-23, 24, 25, 27.

1. Bryan, *The Papago Country*, p. 418. Barnes, *Arizona Place Names*, p. 193; Irish, "Place Names of Organ Pipe Cactus National Monument"; Bernard L. Fontana, "Archeological Survey of the Cabeza Prieta Game Range, Arizona" (unpublished manuscript dated 1965 in the Arizona Archeological Center library, Tucson), p. 80.

2. Butler and Lewis, "Mineralization in the Organ Pipe Cactus National Monument," p. 29.

Occupation of the Growler area following discovery of the copper deposits took place quickly, and by the early 1890s there was a small settlement nearby called Growler Camp.³ Evidently mining began on a small scale and blossomed early in the twentieth century. Some of the earliest claims in the newly-designated Growler Mining District included the Alice (1888), Golden Eagle (1888), Black Copper (1890), Morning Star (1892), Toledo (1893), and New Years Gift (1896).⁴ A claim on the Big Growler Mine was filed January 29, 1897, by John W. Wise and S. B. Wellington, and apparently these two individuals were among the first to actively work the site.⁵ The mine changed hands repeatedly after 1900. In 1907 Emil Zitlow and a man named Baker were working the mine. Around 1910 George H. Morrill purchased the mine and incorporated twenty-six claims at the site into his Colonial Copper Company.⁶ Productivity peaked in 1916 and in the following year Morrill closed both the Growler and the neighboring Yellow Hammer Mine. From then various lessees worked the area until 1928, when Morrill sold his holdings to Albert I. Long, who with others operated the Growler over the next several decades.⁷

As the Growler Mine and its subsidiary mines developed early in the 1900s, a small supportive community grew up in Growler Pass. Bates Well, located two miles away, provided water for the settlement and underwent a temporary name change to Growler Well. Carl Lumholtz visited the mine during his scientific survey of the Papaguerfa in 1909-10. "There is a copper mine here," he wrote,

but work on it has been suspended, and the place is inhabited by very few people. An American who was in charge of the mine and the store received me hospitably. He invited me to a square meal or two, presented me with some copies of magazines and recent newspapers, and, above all, helped me out

3. "Official Map of Pima County, Arizona. 1893." Compiled and drawn by George J. Roskruge. Reprint, Tucson Blueprint Company, Tucson, Arizona.

4. "Index to Mining Record. Name of Mine." Office of Pima County Recorder, Tucson, Arizona. Vol. 4. A complete list of patented claims in the Growler District between 1888 and 1976 is presented in Appendix C.

5. Record of Mines. Pima County Recorder's Office. Deed Book FF, pp. 408-9.

6. Claims located in 1909 by the Colonial Copper Company were the Madison, Portland, Palo Verde, Thrush, Butte, Liberty, Copper Flat, Hawk, Arizona, Tuesday, Advance, Daisy, Growler, American, Blue Bird, Gila, Copper Hill, Treasury, Wednesday, Washington, Boston, Quail, Lincoln, Maggie, Munroe, and Yellow Hammer. Bureau of Land Management Survey Plat of the Claim of Colonial Copper Co., 1909. BLM Office, Phoenix, Arizona.

7. Hoy, "Frontier Period," p. 178.

with a new supply of rope for my outfit, of which I was sadly in need.⁸

According to one account the store was situated along the north side of the road that traversed Growler Pass, while the main mine shaft lay south of the road.⁹ At one time an adobe smelter stood near the mine,¹⁰ and Tom Childs reported that the Growler once boasted three boilers, two steam hoists, and an air compressor.¹¹ Residents of Growler Camp supplemented their diet with vegetables and water-melons raised near the mine and with fish hauled overland from Puerto Penasco on the Gulf of California.¹² Cattle also ranged over the flatland adjacent to the mine. In the late 1920s John Cameron managed several hundred head of livestock at Growler Ranch, a mile or so west of Bates Well.¹³

When Albert I. Long took over the Morrill claims at Growler in 1928 they had changed little from their appearance in 1909.¹⁴ Some of the claims had hardly been worked. The Daisy, for example, had produced nothing; nor had the Copper Flat, which became the tract on which Long's adobe home rested. But other Long holdings proved to be paying concerns, like the Copper Hill shaft, 268 feet deep, and especially the Yellow Hammer, 250 feet deep, which evidently was the richest claim.¹⁵ Eventually Long leased the group to John Cameron, who used the abandoned water-filled shafts to water his cattle. By 1940 the site was empty and the water was not being used.¹⁶ About 1942 one of the frame houses was dismantled and moved from the pass to Henry Gray's ranch at Bates Well.¹⁷ Work at the Growler Mine and adjoining claims was never reactivated.

8. *New Trails in Mexico*, p. 290. A diagram of the Growler Mine area showing the mine and Growler Camp in relation to the pass is included on "Map of Mines Tributary to the Custom Smelter to be Erected by the Arizona Smelting Co." Tucson, Arizona, 1907. Map Collection, University of Arizona Library, Tucson.

9. Fontana, "Archaeological Survey," p. 80.

10. Butler and Lewis, "Mineralization in the Organ Pine Cactus National Monument," no pagination indicated.

11. *Ajo Copper News*, December 28, 1917, cited in Hoy, "Frontier Period," no pagination indicated.

12. Hoy, "Frontier Period," no pagination indicated.

13. *Ibid.*

14. "List of Mineral Claims, Growler District, 1932." Bureau of Land Management Survey Map, Township 14 South, Range 7 West, Gila and Salt River Meridian, Arizona. BLM Office, Phoenix.

15. Hoy, "Frontier Period," no pagination indicated.

16. *Ibid.*, p. 178.

17. Gray Interview.

Long, who had vigorously opposed the National Park Service and whose agitation aided passage of the 1941 law permitting mining on the monument, saw little prosperity at the Growler after that date. In 1956 and 1957 Long and Thomas Alley sold their patented claims in the Growler District to the National Park Service. Subsequently in the mid-1960s the Mineral Trust Corporation and the Phelps-Dodge Corporation filed claims on the acquired property. The Mineral Trust Corporation quit its claims upon notification that they had been previously acquired by the National Park Service. Phelps-Dodge, however, contested the federal acquisition for a time before finally withdrawing.¹⁸ The Growler Mine and its immediate environs have been protected from development since that incident.

Growler Mine has an intimate historical association with the area of Organ Pipe Cactus National Monument. It is one of the earliest mines located in the region south of Ajo and it was once a reliable producer of high grade copper ore. Unfortunately, the National Park Service made a regrettable management decision when it allowed the surviving structures at Growler Camp to be destroyed. Their absence considerably lessens the desirability for interpreting this site. It appears that the rationale for this action lay in consideration for public safety, even though the site is geographically remote to most park visitors and such procedure in no way justifies the elimination of irreplaceable historical properties. Growler Mine played an important role in the mining industry along Arizona's southern border but its history should be interpreted to the public at another location, such as the visitors center or at an interpretive facility placed at Victoria Mine. The Growler Mine site is classified as belonging to the Third Order of Significance and is recommended for nomination to the National Register of Historic Places.

4. Other Mines, Prospects, and Mining Districts

The following sites, taken together, are significant to the broad history of mining within the area of Organ Pipe Cactus National Monument. Individually they are of less importance and in all cases they fail to meet criteria to justify their nomination to the National Register of Historic Places.

a. Martinez Mine

Less than two miles northwest of the Victoria Mine is Martinez Mine, named after its discoverer, J. A. C. Martinez, of Ajo. Martinez was employed at a co-op store and on weekends he prospected in the Sonoyta and Puerto Blanco mountains.¹ He located this site in the northern Sonoytas sometime prior to 1917,

18. Phelps-Dodge withdrew after an opinion favorable to the National Park Service was delivered by the Associate Solicitor for Parks and Recreation. Hoy, "Frontier Period," no pagination indicated.

1. Hoy, "Frontier Period," p. 190. Irish, "Place Names of Organ Pipe Cactus National Monument."

for by that date it was known as the Milton, Levy, and Martinez Camp.² The shaft at the Martinez Mine ran 60 feet deep. Copper, silver, and lead were extracted, and there is a report that Tom Childs ran a placer gold mine nearby and found a nugget appraised at \$800.³ Work at Martinez Mine ceased long ago, probably before 1925. The site today is remote and therefore inaccessible to the public.

b. Lost Cabin Mine

Southwest of Martinez Mine and approximately midway between it and the Victoria is the Lost Cabin Mine, a surface prospect hole that was unsuccessfully worked and then abandoned in years past. Apparently the claim went unpatented, or at least was recorded under another name by unknown persons.¹ A unique characteristic of the site is the presence of the partial walls and foundation of an old stone house, presumably the structure from which the name of the mine was derived. The house measures approximately 27 feet long by 21 feet wide. The walls measured about 9 feet in height. Instead of mortar between the granite stones there are small stones placed solidly in the spaces, an unusual feature in buildings of this type and one that possibly denotes considerable age for the structure. The nearest prospect holes are located some distance from the building.² Located in the Sonoyta Mountains, Lost Cabin Mine is geographically inaccessible to park visitors. It is recommended that the stone ruin not be destroyed.

c. Copper Mountain Mine

Copper Mountain Mine, a prospect site, is located on a low hill west of the Ajo Mountains in the northeastern section of Organ Pipe Cactus National Monument. Copper Mountain represents the smallest mineralized area in the monument and there is evidence that only tiny amounts of ore have been produced there.¹ One of the earliest persons to work the site was William Knox, a mine owner in Ajo, although the first recorded claim was filed on April 1, 1949, and was called the April Fool. Albert I. Long perhaps had claims at Copper Hill in addition to those he maintained at Growler Mine, and in the 1950s the Phelps-Dodge Corporation located 150 claim sites in the area of Copper Mountain Mine. William Knox, Jr., continued to hold the claims of his father there, and in 1959 they numbered

2. "Relief Map of the Central Part of the Papago Country, Arizona," in Bryan, *The Papago Country*. However, this designation might logically refer to the cluster of mining interests in that particular vicinity. See also Appleman and Jones, *Milton Mine*, p. 8.

3. Hoy, "Frontier Period," p. 190.

1. Irish, "Place Names of Organ Pipe Cactus National Monument."

2. Greene, Field Notes.

1. Butler and Lewis, "Mineralization in the Organ Pipe Cactus National Monument," p. 30.

ninety-one, while Phelps-Dodge retained fifty-nine more claims west of Knox's. Phelps-Dodge acquired exploration rights to the Knox claims, but in 1962 Knox leased some of these to the Hidden Splendor Mining Company. In the years since, Copper Mountain has seen much activity but little productivity. Other mining claims have been filed on land neighboring the site.² Copper Mountain is not readily accessible to the public.

d. Quitobaquito Mining District

This small district was the site of several nonproductive claims. It is located in the area of the Quitobaquito springs at the southern end of the Quitobaquito Hills near the international boundary. The first recorded claim was for the Quitobaquito Mine, located by A. N. Dorsey and John Gaudolfo in 1894.¹ Two years later another claim was filed for the Atlanta Mine at the request of Mikul G. Levy. The locator of this site was Dorsey, while witnesses were Cipriano Ortega and R. Gatien. The claim was "situated in Pima County, Arizona and at and comprising about one half of the north half of the water and two adobe buildings and water reservoir at the place known as Quitobaquito. . . ." ² In 1909 Tom Childs and John Merrill recorded a claim called Lime Reef, located 100 feet north of the Mexican border.³ The only other patented claims in the Quitobaquito District were for the Agua Dulce and M.A.C.K., both recorded in 1938.⁴ Located along the Puerto Blanco Drive in the monument, the area of the mining district is accessible to tourists visiting Quitobaquito.

e. Miscellaneous Mining Sites

A number of lesser sites complete the mining story at Organ Pipe Cactus National Monument. Many prospects, mostly unnamed, exist in the northern part of the monument in the Growler Mountains. The Dixie Bell Mine was located one mile north of Growler Pass close to the northern boundary of the monument. Numerous pits and trenches are found there.¹ More centrally located was the Dripping Spring Mine, near Dripping Springs in the Puerto Blanco Mountains. The site consists of a shaft and several prospect holes claimed by John Mitchell and Fred Wright in 1918.² Six miles west of Dripping Spring Mine were a few

2. Hoy, "Administrative," pp. 126, 127.

1. Record of Mines, Pima County Recorder's Office. Deed Book FF, p. 74.

2. *Ibid.*, pp. 167-68.

3. Record of Mines, Pima County Recorder's Office. Deed Book OO, p. 553.

4. "Index to Mining Record. Name of Mine." Office of the Pima County Recorder, Tucson, Book II.

1. Butler and Lewis, "Mineralization in the Organ Pipe Cactus National Monument," p. 29.

2. *Ibid.*, (draft manuscript).

shallow diggings known as the Golden Bell Mine, named after Charles E. Bell, a local resident who prospected the site. Quartz extracted from the prospects yielded unprofitable amounts of copper, silver, and gold.³

In the south-central part of the monument is Senita Basin, the location for several early mining claims. Two miles northwest of the Basin, and 1-1/2 miles northeast of Milton Mine, is Baker Mine, named for Gordon Baker, who discovered and worked the site in the 1920s. Baker built the road leading to his claim, and after his death other men worked the mine until 1939 when it was abandoned.⁴ South of Senita Basin and about 1-1/2 miles west of Victoria Mine are several prospects, some once claimed by W. G. ("Boots") Burnham who also had claims in the Growler District.⁵ These sites located in the Puerto Blanco and Sonoita mountains belonged in the Montezuma District. Many other claims have been recorded there between 1889 and 1976.⁶ Finally, in 1918 Richard C. Wright, Newton Meadows, and William Keenan filed for claims located at Williams Springs, today in the southwestern part of the monument and a short distance north of Quitobaquito. It is doubtful these ever produced any mineral ore.⁷

C. Historical Roads and Trails

The land of Organ Pipe Cactus National Monument was once crisscrossed by numerous roads and trails, some doubtless dating back to the area's prehistory when Indians gathered cactus fruit here and established the shortest routes between water sources. By 1900 the country had drawn increasing numbers of people, notably cattlemen and miners, who improved the existing routes and began others. Few of them exist today in any usable condition. The main arteries seem to have been:

1. Old Sonoita Road

Running from Sonoita north to Ajo, this road left Sonoita and went almost directly north until it joined the Tucson-Yuma Road southeast of Ajo. This road had been abandoned by 1917.¹

3. Irish, "Place Names of Organ Pipe Cactus National Monument"; Eldred D. Wilson, J. B. Cunningham, and G. M. Butler, *Arizona Lode Gold Mines and Gold Mining*. Arizona Bureau of Mines, Mineral Technology Series No. 37, Bulletin 137 (Tucson: University of Arizona Press, 1934), pp. 181-82.

4. Irish, "Place Names of Organ Pipe Cactus National Monument."

5. Butler and Lewis, "Mineralization in the Organ Pipe Cactus National Monument" (draft manuscript).

6. "Index to Mining Record. Name of Mine." Office of the Pima County Recorder, Tucson. Books 4-16. See Appendix D for listing of patented claims in the Montezuma District.

7. Hoy, "Frontier Period," no pagination indicated.

1. "Relief Map of the Central Part of the Papago Country, Arizona," in Bryan, *The Papago Country*.

2. Ajo-Sonoita Road

Evidently replacing the old Sonoita Road, this ran directly south from Ajo, veering slightly west to Cherioni Well, now within the monument. There it joined a road running southeast from Bates Well, which it followed to Sonoita, passing about one mile east of Dowling Well. About ten miles above Sonoita another route branched off the Ajo-Sonoita Road and roughly paralleled it south to Dowling Well, continuing on into Mexico where it joined the road linking the Sonoyta River rancherías.²

3. Ajo-Yuma Road

Branching southwest from the Ajo-Sonoita Road five miles below Ajo, this ran through Growler Pass, veered west at Bates Well, and continued on southwestwardly until it met the old El Camino del Diablo, which it followed to Yuma.³

4. Growler Road

This route ran from Quitobaquito north past Cipriano Well and Pozo Nuevo to Growler Mine and to the junction at Bates Well.⁴

5. Walls Well-Bates Well Road

This route extended from Wall's Well, near the northeastern boundary of the present monument, west to bisect the Ajo-Sonoita Road and continue on to Bates Well.⁵

6. Other Roads and Trails

Besides these principal avenues, there were some short subsidiary, or spur, roads and a few trails. One of these ran from the Ajo-Sonoita Road south and west to Dripping Springs and the mine there. Another led south from the same road into the mining area of the Sonoyta Mountains. Yet another route connected the Ajo-Sonoita Road and Quitobaquito by running diagonally between the Puerto Blanco Mountains and the Cipriano Hills.⁶ In addition, there was a trail going

2. *Ibid.*; "Progressive Military Map of the United States Southern Department." U.S. Army Engineers. 1912, 1915. In the files of Organ Pipe Cactus National Monument.

3. "Relief Map of the Central Part of the Papago Country, Arizona," in Bryan, *The Papago Country*.

4. *Ibid.*

5. *Ibid.*

6. "Map of Organ Pipe Cactus National Monument." Compiled by Frank Pinkley, May 1938. In the files of Organ Pipe Cactus National Monument.

northeast from the Ajo-Sonoita Road to the Wall's Well-Bates Well Road, via Copper Mountain Mine. This trail had an offshoot leading from Copper Mountain to the Miller ranch in Alamo Canyon. Still another, the Bates Well Trail, led from the Growler vicinity into Ajo. And there were lesser trails even more infrequently used.⁷

D. A Note on Archeological Resources

An intensive archeological reconnaissance has yet to be accomplished at Organ Pipe Cactus National Monument. Knowledge of prehistoric remains within the lands encompassed by the monument is severely limited because only approximately ten percent of the area has been adequately investigated. Besides the brief preliminary survey completed by Paul H. Ezell in 1951 and 1952, which netted a short article for *The Kiva* and a still-unfinished report for the National Park Service, very little has been done to define the archeological scope of the monument lands. A more intensive operation has been carried out on lands outside the monument by Julian D. Hayden, of the Arizona State Museum, who since 1958 has made a thorough study of Mexico's Sierra Pinacate region. In the 1960s Bernard L. Fontana, of the Arizona State Museum in Tucson, completed a study of the neighboring Cabeza Prieta Game Refuge that discussed a few sites within the monument. And in 1971 a short survey was conducted by Alice Hunt. Yet most of this work has been marginal in terms of applicability to the Organ Pipe area. A definite need exists for an accurate, updated, and detailed description of the monument's archeological resources.¹

The substance of the archeological work accomplished to date contends that the area was occupied recurrently by various groups of people who seasonally came to forage cactus fruit and to trade. Ezell postulated that the visitors to the eastern and southern portions of the monument were ancestors of modern Papago Indians. Those who occupied the northern part were probably inhabitants of the Santa Cruz Valley in south-central Arizona, while sites in the western part of the monument showed a relationship of their occupants to cultures of the Colorado River Valley. Ezell observed three categories of prehistoric sites: rock shelters and quarry workshops chiefly located in the mountainous areas; campsites in the valleys; and brief trail campsites situated along ridge crests.² Every known natural water source became a primary camping place, but trail camps have been found miles from water, usually close to a native food supply.³

7. *Ibid.*; "Progressive Military Map of the United States Southern Department" For further information on the roads, see Hoy, "Early Period," pp. 39, 125.

1. National Park Service, *Environmental Assessment*, p. 28; National Park Service, "Resource Management Plan," pp. 5-6, 9.

2. National Park Service, *Environmental Assessment*, p. 28; National Park Service, "Resource Management Plan," p. 6. See Chapter I of this report for discussion of the archeological findings of Ezell and others.

3. Ezell, "Archeological Survey of Northwestern Papageria," p. 20.

Petroglyphs and pictographs abound in the monument at nearly every one of these sites, and are particularly noticeable at rock overhang shelters in the more mountainous areas.⁴ At watering places the presence of bedrock mortars for grinding beans suggests frequent habitation of these sites by assorted Indian groups. Stone grinders have been found in abundance at even the more remote desert trail campsites. Also, numerous caches of shell have been located along trails once utilized by Hohokam Indians in transporting materials from the Gulf of California.⁵ The principal archeological resources thus far identified in Organ Pipe Cactus National Monument are located in the following general areas:

1. Ajo Mountains

Indians resided in the mountains both for shelter and proximity to reliable water sources. Sweetwater Pass and Ali Wau Pass were frequented because of the many small caves and overhanging cliffs that provided shelter. At Wild Horse Tank are remains of a prehistoric campsite. Indian burial sites have been located in the Ajos. Similar occupation occurred to the south in the Santa Rosa Mountains.⁶

2. Growler Mountains

Like the Ajos, the Growlers afforded protection and nearness to water. Numerous aboriginal campsites have been discovered in these mountains, notably some ruined rectangular stone structures that were possibly roofless shelters. Evidence of early human occupation had been found in caves and beneath overhanging rock cliffs in the Growlers.⁷

3. Puerto Blanco Mountains

Vestiges of prehistoric human occupation have been found in the Puerto Blancos, especially at Dripping Springs, where there are several caves and overhangs with smoke-blackened ceilings believed occupied by Amargosan people centuries ago. An Areneño burial place was recently discovered there.⁸

4. *Ibid.*, p. 6.

5. Eden, "History of Organ Pipe Cactus National Monument," p. 4; National Park Service, "Resource Management Plan," p. 7; Bryan, *The Papago Country*, p. 27.

6. Irish, "Place Names of Organ Pipe Cactus National Monument"; National Park Service, *Environmental Assessment*, p. 28.

7. Eden, "History of Organ Pipe Cactus National Monument," p. 4; Ezell, "Archeological Survey of Northwestern Papaguaria," p. 21.

8. National Park Service, "Resource Management Plan," p. 7; Greene, Field Notes.

4. Bates Well Area

There is a Hohokam campsite near Bates Well complete with stone house outlines and numerous petroglyphs.⁹

5. Quitobaquito Area

Quitobaquito has been occupied intermittently over hundreds of years and the area has bequeathed a large number of artifacts stretching from the San Dieguito Complex period into the twentieth century. Bedrock mortars can be seen a short distance from the pond, near the present Puerto Blanco Drive. Near Quitobaquito are a few rock shrines marking the route of the old Papago salt pilgrimages.¹⁰

9. National Park Service, "Resource Management Plan," p. 28.

10. *Ibid.*, p. 7; Greene, Field Notes; Fontana, "Archaeological Survey of the Cabeza Pireta Game Range," p. 70.



APPENDICES



APPENDIX A

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

[No. 2232--Apr. 13, 1937--50 Stat. 1827]

WHEREAS certain public lands in the State of Arizona contain historic landmarks, and have situated thereon various objects of historic and scientific interest; and

WHEREAS it appears that it would be in the public interest to reserve such lands as a national monument, to be known as the Organ Pipe Cactus National Monument:

NOW, THEREFORE, I, Franklin D. Roosevelt, President of the United States of America, under and by virtue of the authority vested in me by section 2 of the Act of June 8, 1906 (ch. 3060, 34 Stat. 225; U. S. C. title 16, sec. 431), do proclaim that, subject to existing rights, the following-described lands in Arizona are hereby reserved from all forms of appropriation under the public-land laws and set apart as the Organ Pipe Cactus National Monument:

GILA AND SALT RIVER MERIDIAN

Beginning at a point on the southern boundary of the Papago Indian Reservation which is the point for the corner of secs. 5, 6, 31, and 32, Tps. 17 and 18 S., R. 3 W.; thence south approximately five and one-half miles to the International Boundary; thence northwesterly along the International Boundary to the intersection with the position for the third meridional section line through unsurveyed T. 17 S., R. 8 W.; thence north on the third meridional section line through Tps. 17, 16, 15 and 14 S., R. 8 W. (unsurveyed), to the point for the corner of secs. 15, 16, 21, and 22; thence east on the third latitudinal section line through T. 14 S., Rs. 8, 7, 6 and 5 W., to the corner of sections 13, 18, 19, and 24, T. 14 S., Rs. 4 and 5 W., on the west boundary of the Papago Indian Reservation; thence southerly and easterly along the west boundary of the Papago Indian Reservation to the point for the corner of secs. 5, 6, 31, and 32, Tps. 19, and 18 S., R. 3 W., which is the point of beginning, containing approximately 330,690 acres.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of the monument as provided in the act of Congress entitled "An Act To establish a National Park Service, and for other purposes," approved August 25, 1916 (ch. 408, 39 Stat. 535; U. S. C., title 16, sects. 1 and 2), and acts supplementary thereto or amendatory thereof; *Provided*, that the administration of the monument shall be subject to: (1) Right of the Indians of the Papago Reservation to pick the fruits of the organ pipe cactus and other cacti, under such regulations as

may be prescribed by the Secretary of the Interior; (2) Proclamation of May 27, 1907 (35 Stat. 2136); (3) Executive Order No. 5462 of October 14, 1930; and (4) Executive Order of November 21, 1923, reserving a 40-acre tract as a public water reserve.

The reservation made by this proclamation supersedes as to any of the above-described lands affected thereby the temporary withdrawal for classification and other purposes made by Executive Order No. 6910 of November 26, 1934, as amended.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the city of Washington this 13 day of April in the year of our Lord nineteen hundred and thirty-seven and of the [SEAL] Independence of the United States of America the one hundred and sixty-first.

FRANKLIN D. ROOSEVELT

By the President:
CORDELL HULL,
The Secretary of State

APPENDIX B

AN ACT

To Permit mining within the Organ Pipe Cactus
National Monument in Arizona, approved October 27,
1941 (55 Stat. 745)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That within the Organ Pipe Cactus National Monument in Arizona all mineral deposits of the classes and kinds now subject to location, entry, and patent under the mining laws of the United States shall be, exclusive of the land containing them, subject to disposal under such laws, with right of occupation and use of so much of the surface of the land as may be required for all purposes reasonably incident to the mining or removal of the minerals and under such general regulations as may be prescribed by the Secretary of the Interior (16. U.S.C. Sec. 450s.)

(Repealed by Public Law 94-429, 94th Congress, S. 2371, September 28, 1976, "An Act to provide for the regulation of mining activity within, and to repeal the application of mining laws to, areas of the National Park System, and for other purposes."

APPENDIX C

Patented Claims in the Growler Mining District, 1888-1976,
with Year of Record.

(From "Index to Mining Record. Name of Mine," Vol. 4-16,
Pima County Recorder's Office, Tucson, Arizona)

<u>1888</u> Alice Golden Eagle Great Western	<u>1900</u> Arcturus Auchomeda Achomeda [<i>sic</i>] Bates Bates Crawford Crawford Dipper Great Bear Hamilton Julia Julia Lafavre La fevre [<i>sic</i>] Maggie Moon Orion Orion Pleaides Sun Sun Sirus Washington Washington Yellowhammer Yellowhammer	<u>1902 (cont'd)</u> Copper Flat Daisy Liberty Mocco Matie Portland Palo Verde Quail Tuesday Treasury Washington Wednesday
<u>1890</u> Black Copper Copper Lion Red Warrior San Francisco Sun Rise		<u>1903</u> The Bonanza Bates Giant Little Giant Utica Yellowhammer
<u>1892</u> Alice Great Western Morning Star Pittsburgh		<u>1904</u> Jabonero
<u>1893</u> Keating Toledo		<u>1906</u> Carbonate Hill No. 1 Gold Standard No. 1 Gold Standard No. 2 Solita
<u>1894</u> Granit Mountain [<i>sic</i>]		<u>1907</u> America Growler Gila Lincoln Munroe Thrush Tamarach No. 1 Gold Mine
<u>1896</u> Andrews Canyon Excelsior No. 1 Excelsior No. 2 New Years Gift Tiger	<u>1901</u> C.C. Bean Escondida Golden Crop Lirius Rams Home Wrangler (placer)	
<u>1897</u> Big Growler Mammoth	<u>1902</u> Arizona Boston Butte Copper Hill	

1909

Arizona (amended)
Berkeley
Butte (amended)
Blue Bird (amended)
Boston (amended)
Columbia
Copper Flat (amended)
Copper Hill (amended)
Hesper
Hesper No. 2 (amended)
Hesper (amended)
Harvard
Hawk (amended)
Lincoln
Liberty
Lincoln (amended)
Maggie
Monroe
Madison (amended)
Munroe (amended)
Maggie (amended)
Rambler Nos. 1-24
Ranson Nos. 1-22

1911

Monadnock No. 1
Monadnock No. 6
Monadnock No. 7
Hope No. 1

1912

T. & C.

1914

Bennett-Taylor
Cimerone Nos. 1-5

1916

Hesper No. 1
Hesper No. 2
Hesper No. 4

1917

Bernice Nos. 1-8
Empire No. 1
Empire No. 2
Joe
Patt
The "X"
The "X" No. 2

1918

Oklahoma Nos. 1-5

1919

Porphyry No. 1
Porphyry No. 2

1920

Cimarron Nos. 1-23

1921

Dixie Nos. 1-6
Lost Trail
Neptune

1922

Lost Trail No. 2
Lost Trail No. 3

1925

Jumbo No. 3
Jumbo No. 4

1927

Gold Standard No. 1
Gold Standard No. 2

1928

Tamarac Nos. 1-4

1929

Metamorphic Nos. 1, 2,
3, 5

1930

Wilson Nos. 1-24
(formerly Cimarron
Nos. 1-24)

1931

Hope No. 1
Tamarac Nos. 8, 9, 13,
14, 15

1932

White Swan Nos. 1-8

1933

Sunset
Tamarac Nos. 1, 2, 4,
(extensions)
Tamarac No. 6
Veta Grande Nos. 1-6
Good Hope
Good Hope No. 1

1934

Bertie No. 1
Sunny Boy
Sunshine
Golden Bell No. 1
Golden Bell Nos. 2-4
Golden Spoon
Good Luck

1935

Good Luck No. 1
Good Luck No. 2

1936

Big Spring No. 2
Blue Bird
Blue Bird Nos. 1-6
Blue Bird Nos. 7-14
The Conde
Goldie
Hope No. 2
Katherine
Reward
Silver Slip No. 1
Silver Slip No. 2
Silver Ram Nos. 1, 2, 3,
5, 6, 12
Tamerac No. 3 (extension)
Tamerac No. 3 (extension
No. 1)
Tamerac No. 6 (extension)
Tamerac Nos. 7, 10, 11,
13
The Conde
Tinaha No. 1
Tinaha No. 2
Tim
Topsy Nos. 1-4

1944

Growler No. 1

1945

Growler Nos. 2-4

1947

Blue Shale No. 1
Blue Shale No. 2
Green Stone
Green Giant
Kookie
Sunshine No. 1
Sunshine No. 2
San Antonio One
San Antonio Two

1948

Verde No. 1
Verde No. 2

1949

Josephine No. 1
Josephine No. 2
Rhonda Ann
Rhonda Ann No. 2

1950

Verde No. 3

1951

Verde Nos. 3-6

1952

Anya

1953

Last Chance Nos. 1-16
Linda B
North Star

1954

Quartz Reef

1955

Antelope Silica No. 1
Antelope Silica No. 2

1956

Resurrection [*sic*] No. 1
Resurrection No. 2
Singlejack

1957

Pima Belle Nos. 1-8

1960

Hilltop No. 1

1962

Tripple A No. 1
Tripple A No. 2

1966

Antelope Silica No. 1
(amended)

G.W. Nos. 1-86
Silver Lode No. 1
Silver Lode No. 2

1967

ABC Nos. 19-26, 45-52,
63-114
Silver Lode Nos. 3-4
WGW Nos. 1-132

1969

Silver Lode Nos. 3-13

1970

Silver Lode Nos. 14-36

1971

Lenmar Lode Nos. 1-3

1972

Margie Nos. 1-108

1974

Canary Mine No. 4
Canary Mine No. 6
Gabriele Nos. 3-30
Joyce B. Wickell Nos. 1-3
Lillian
Michael Wickell No. 1
Michael Wickell No. 2
Old Smuggler No. 1
Old Smuggler No. 2
Richard Wickell No. 8
Ruby
Silver Lode Nos. 37-43
Victoria No. 2
Wickell Mine
Wickell Mine
Wickell No. 3
Wickell No. 4
Wickell Nos. 9-12

1976

Silver Lode No. 1
Silver Lode Nos. 1-4, 8,
40, 41, 11, 12, 24, 25,
27, 29, 35, 17, 23, 30,
15, 16, 32, 18, 5

APPENDIX D

Patented Claims in the Montezuma Mining District, 1889-1976,
with Year of Record.

(From "Index to Mining Record. Name of Mine," Vol. 4-16, Pima
County Recorder's Office, Tucson, Arizona)

<u>1889</u> Ezra Glover North Grannet	<u>1961</u> Rhyolite No. 1
<u>1891</u> Lilley Tunner Woodside	<u>1966</u> Copper Giant
<u>1936</u> Desert Star Papago Star	<u>1968 and 1969</u> N.J.J. Nos. 1-11
<u>1955</u> Alma C.O.D.	<u>1972</u> Montezuma No. 3
<u>1959</u> Star Nos. 1-72 Star Nos. 1-72 (placer) Montezuma No. 5	<u>1974</u> Gabriele Nos. 3-30 Victoria Nos. 11-16
	<u>1975</u> Au Drene Nos. 1-4 Victoria Nos. 16-20
	<u>1976</u> Victoria Nos. 7-10



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ILLUSTRATIONS

Illustration 1.

Archeological map of the Papaguería.

From Paul H. Ezell, "An Archeological Survey
of Northwestern Papagueria,"
The Kiwa 19 (Spring, 1954).

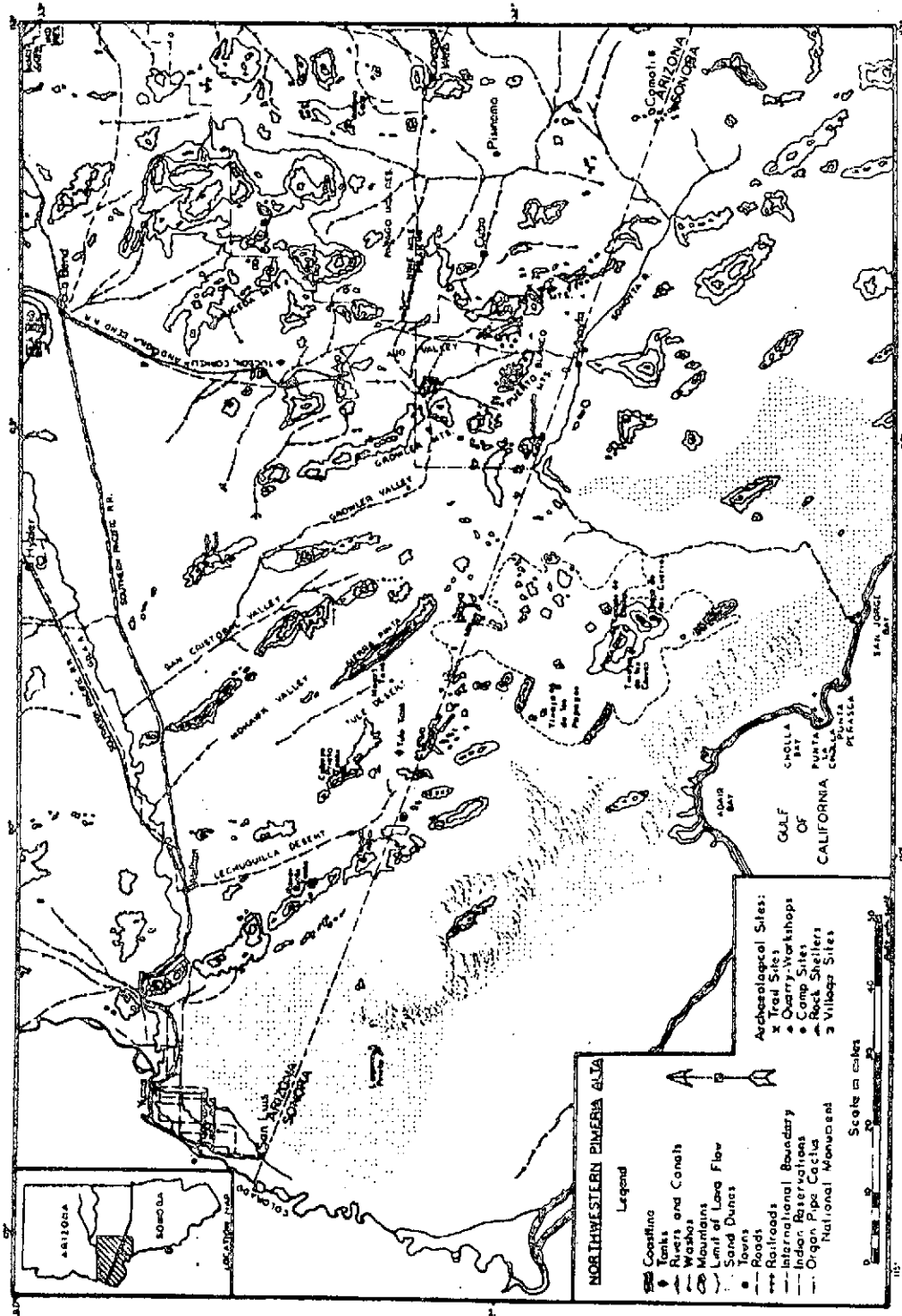
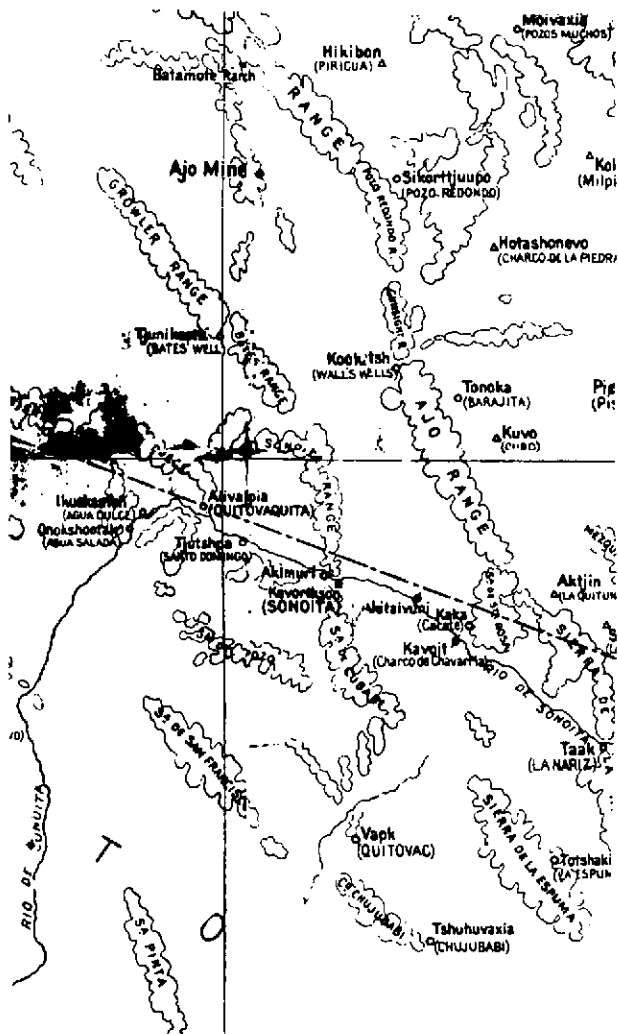


Illustration 2.

Papago rancherías of the Organ Pipe
Cactus National Monument country.

Section of "Map Showing Papago Rancherías
Present and Past,"
prepared by Carl Lumholtz, ca. 1912.



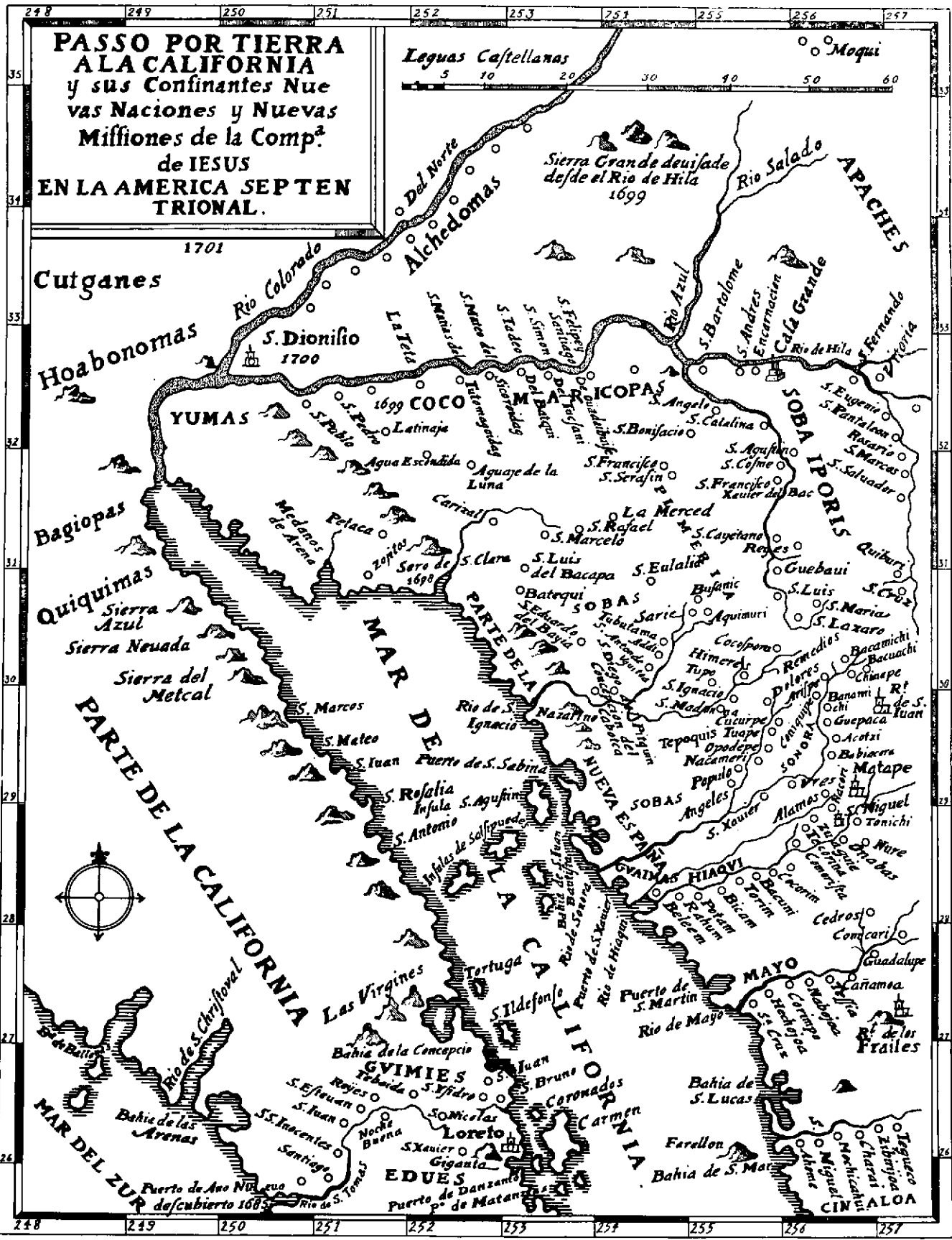
- Rancheria
- △ Temporales (Summer Rancheria)
- Abandoned Rancheria
- ◻ Former Camp of the Sand Papago

Illustration 3.

"Passo por Tierra ala California."
Kino's map of Pimería Alta, 1701.

Organ Pipe Cactus National Monument.

**PASSO POR TIERRA
ALA CALIFORNIA
y sus Confinantes Nue
vas Naciones y Nuevas
Miffiones de la Comp^a
de IESUS
EN LA AMERICA SEPTEN
TRIONAL.**



DRAWN 1701 BY EUSEBIO FRANCISCO KINO, S. J.

TRACED 1948 BY R. L. IVES

Illustration 4.

The country of Organ Pipe Cactus National Monument as shown in the "Official Map of Pima County, Arizona, 1893."

Organ Pipe Cactus National Monument.

Illustration 5.

"Boundary Between the United States and Mexico
as Surveyed and Marked by the International
Boundary Commission. . . ." 1896.

Detail from Plate VII, *Mexican Boundary Commission Atlas*.

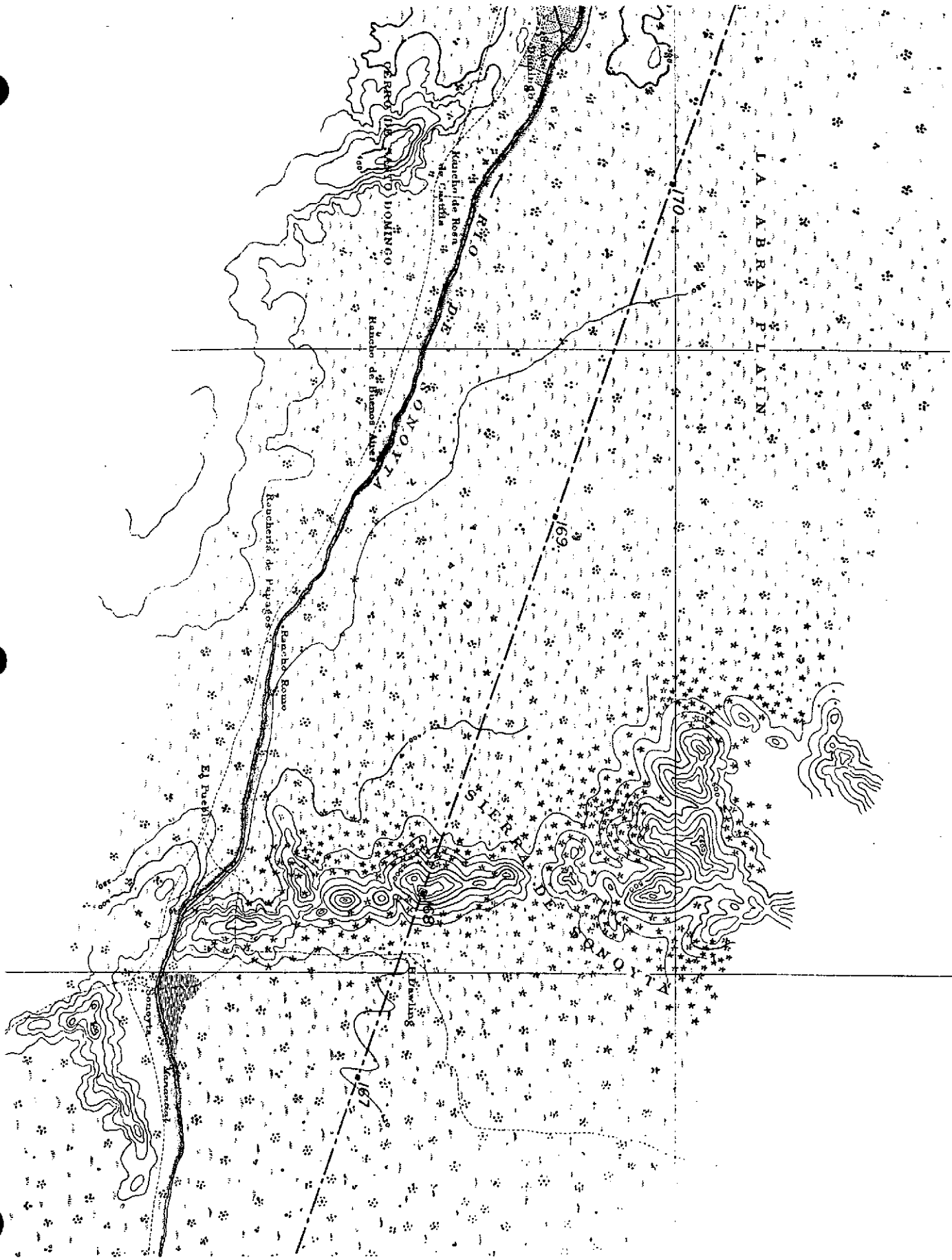


Illustration 6.

"Boundary Between the United States and Mexico
as Surveyed and Marked by the International
Boundary Commission. . . ." 1896.

Detail from Plate IX, *Mexican Boundary Commission Atlas*.

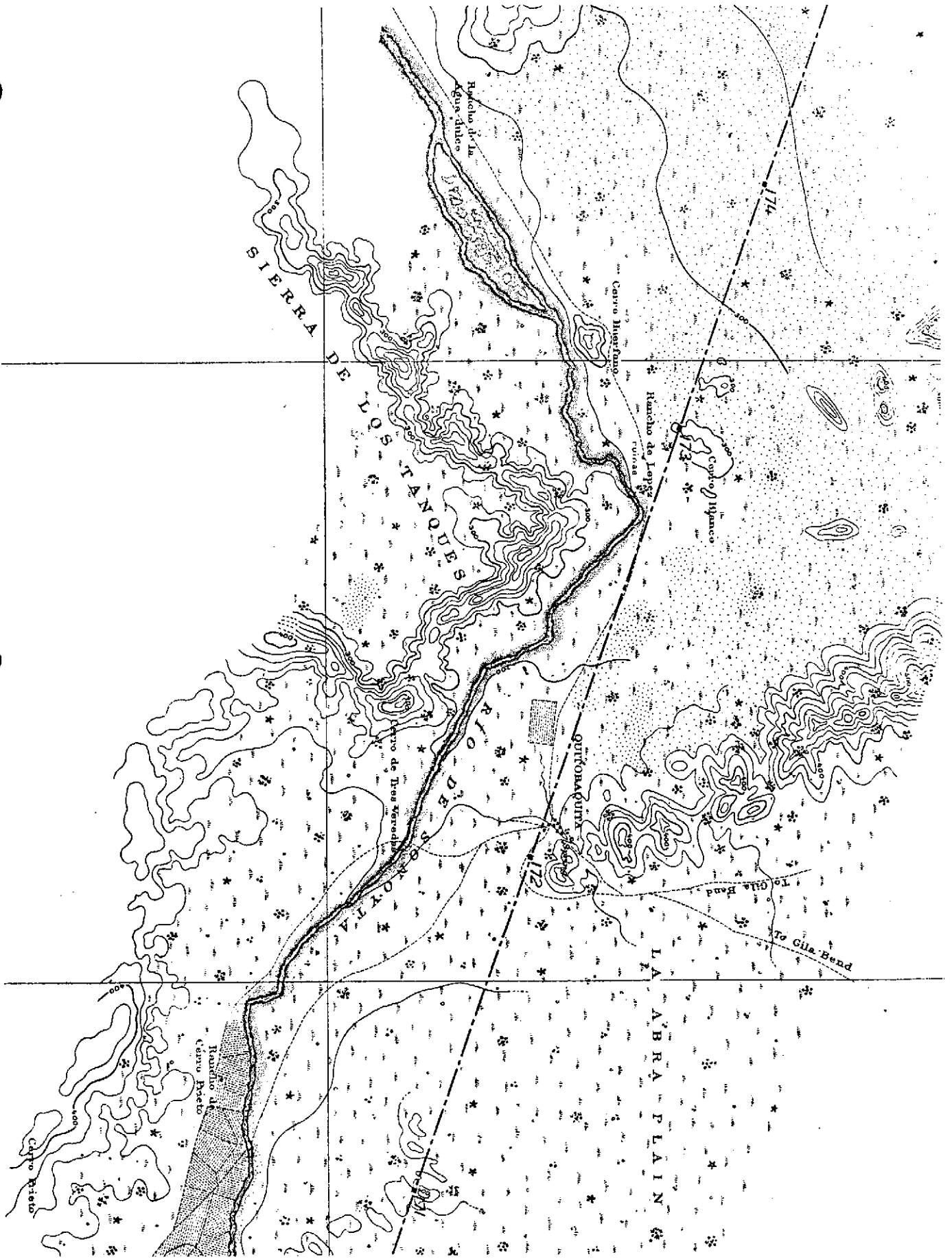


Illustration 7.

Trails in the border country.

From W. J. McGee, "The Old Yuma Trail,"
National Geographic Magazine 12 (April, 1901).

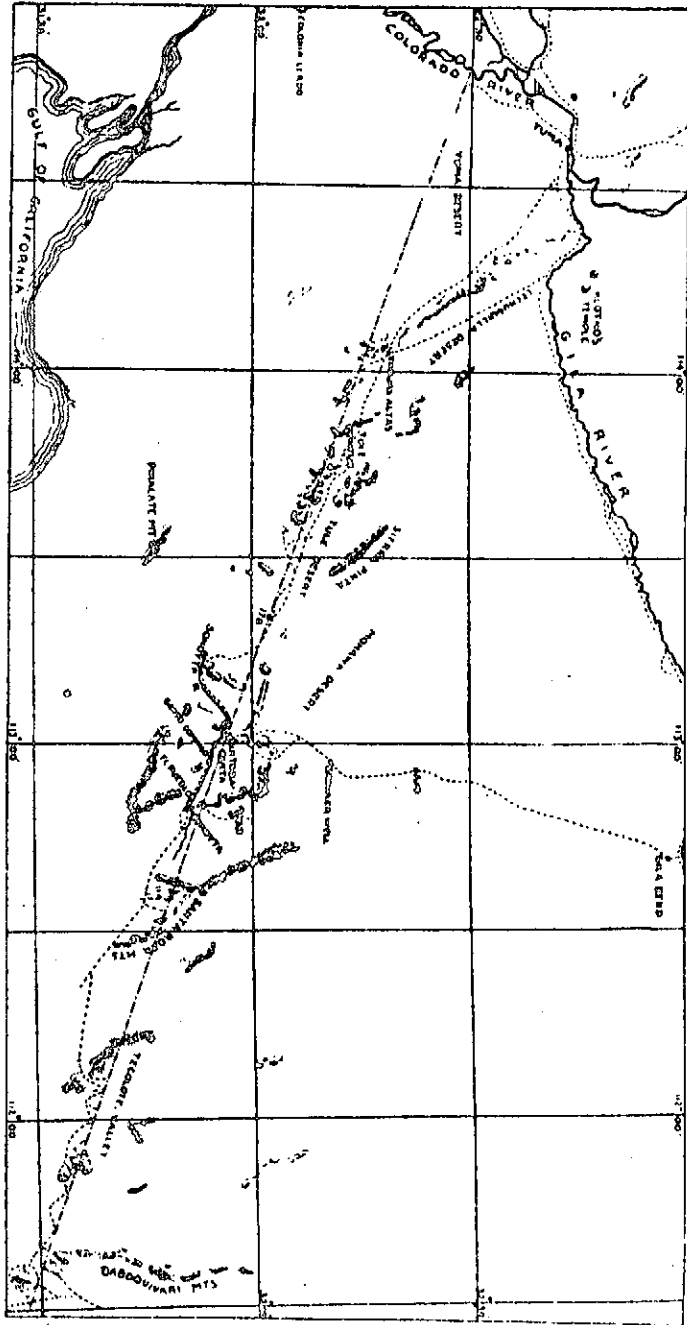
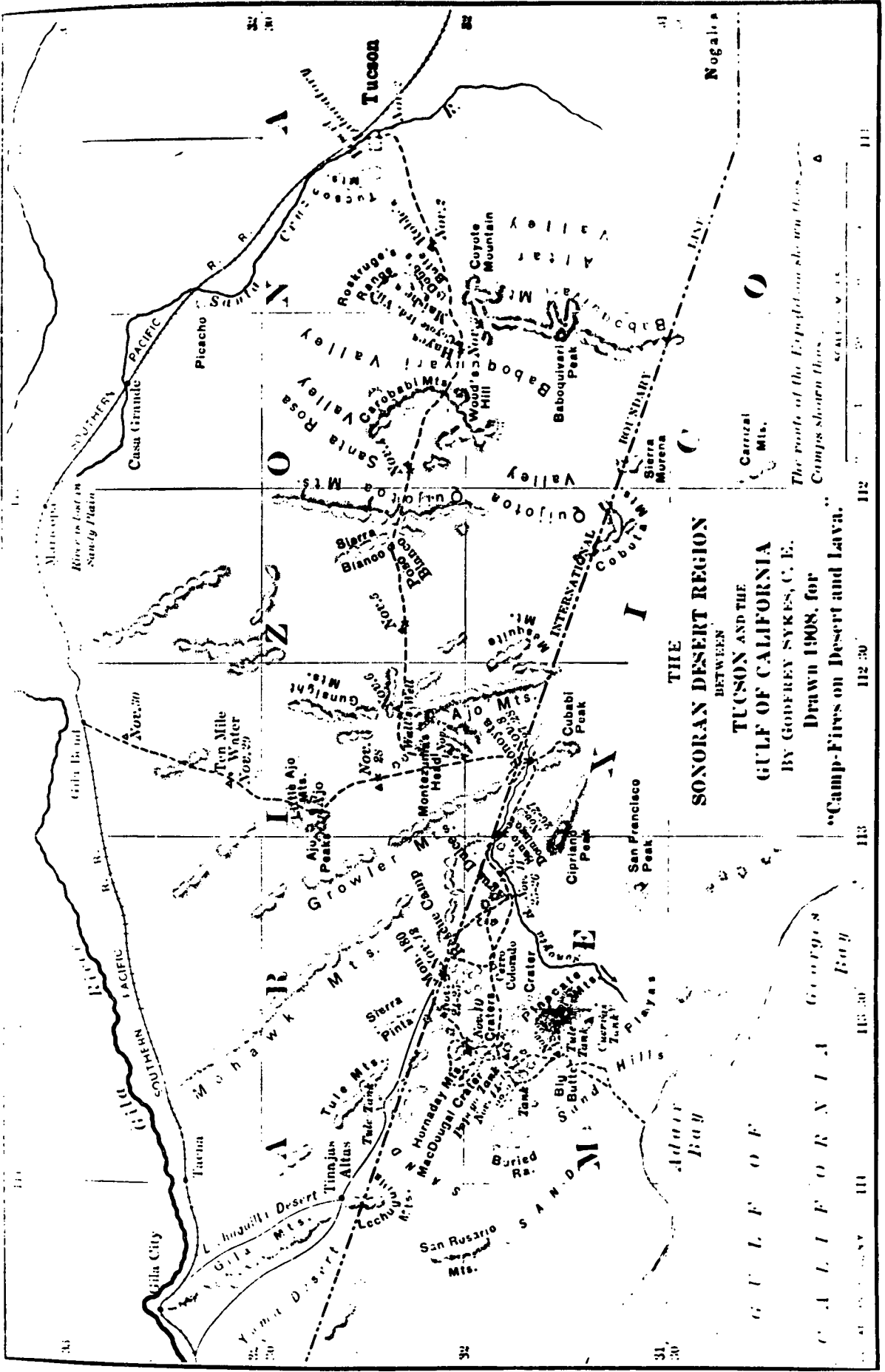


Illustration 8.

Map showing the country traversed by the MacDougal-Hornaday Expedition, 1907.

From William T. Hornaday, *Camp-Fires on Desert and Lava* (New York: Charles Scribner's sons, 1908).



**THE SONORAN DESERT REGION
BETWEEN
TUCSON AND THE
GULF OF CALIFORNIA**

BY GORDEN SYKES, C. E.
Drawn 1908. for
"Camp-Fires on Desert and Lava."

The route of the Expedition shown through
Camps shown thus: ○

GULF OF CALIFORNIA

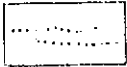
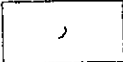
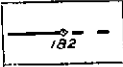


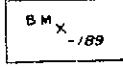
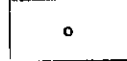



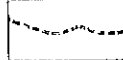



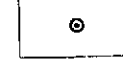
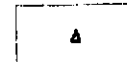

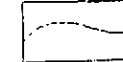
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Illustration 9.

Historical roads and trails in the Organ Pipe Cactus country.

Detail from "Relief Map of the Western Part of the Papago Country, Arizona, Showing Desert Watering Places," in Kirk Bryan, *The Papago Country, Arizona* (Washington: Government Printing Office, 1925).

EXPLANATION

		
Intermittent stream	Represo	Boundary monument
		
Wash (Water courses that is usually dry)	Temporal	Bench mark
		
Nonflowing well	Road	Mine
		
Abandoned well or dry hole	Secondary road	Cistern or other artificial reservoir
		
Spring	Trail	Pumping plant or windmill
		
Natural reservoir or tank	Signpost erected by U. S. Geological Survey	Irrigation canal, ditch, or pipe line

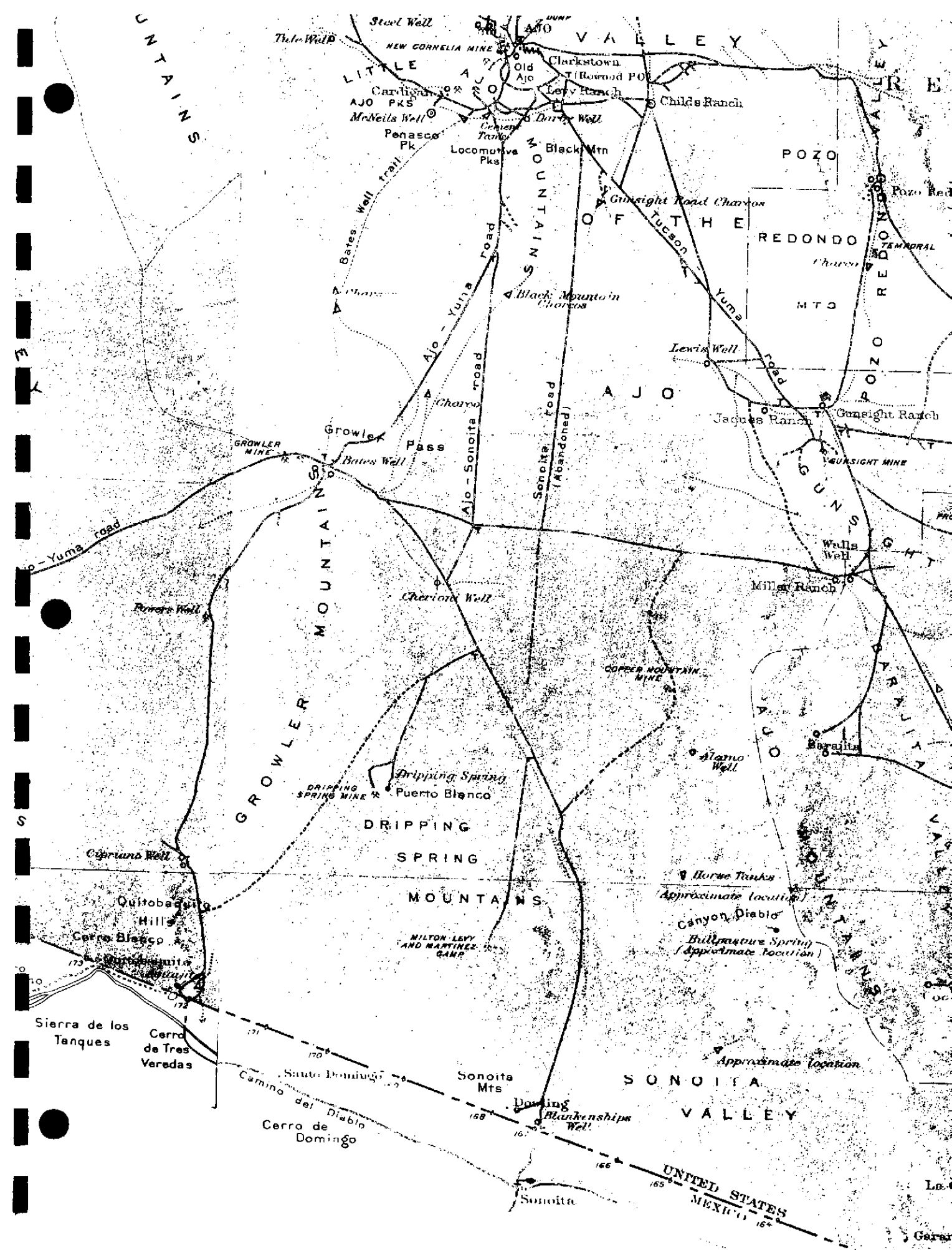


Illustration 10.

Santo Domingo in 1907. View from the southeast by Dr. D. T. MacDougal. The large building housed a flour mill, soap factory, blacksmith shop, storerooms, and men's quarters. Across the street were six residences, a furniture store, and another store. To the left is the customs house.

From William T. Hornaday, *Camp-Fires on Desert and Lava* (New York: Charles Scribner's Sons, 1908).
Courtesy of Wilton E. Hoy.

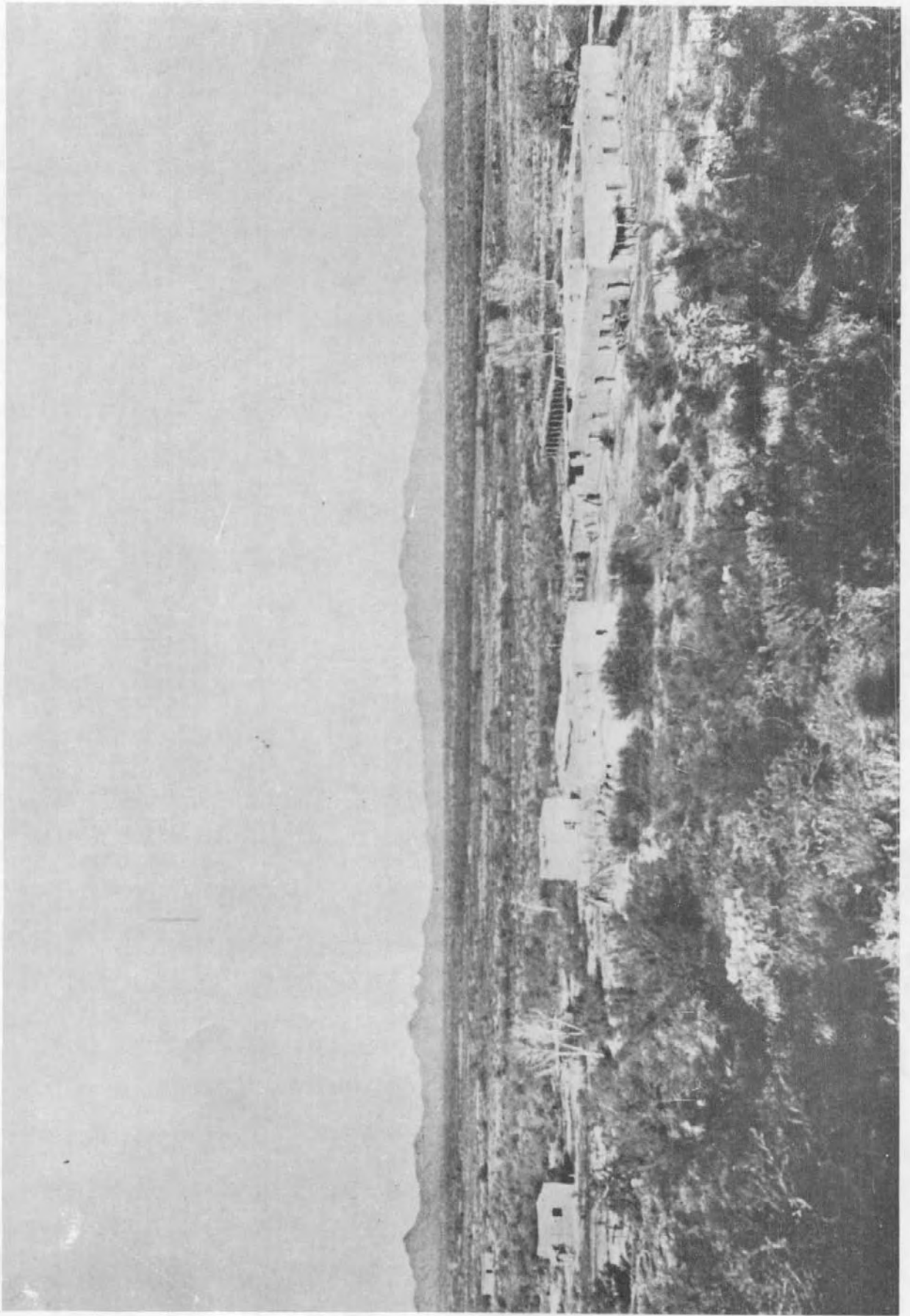
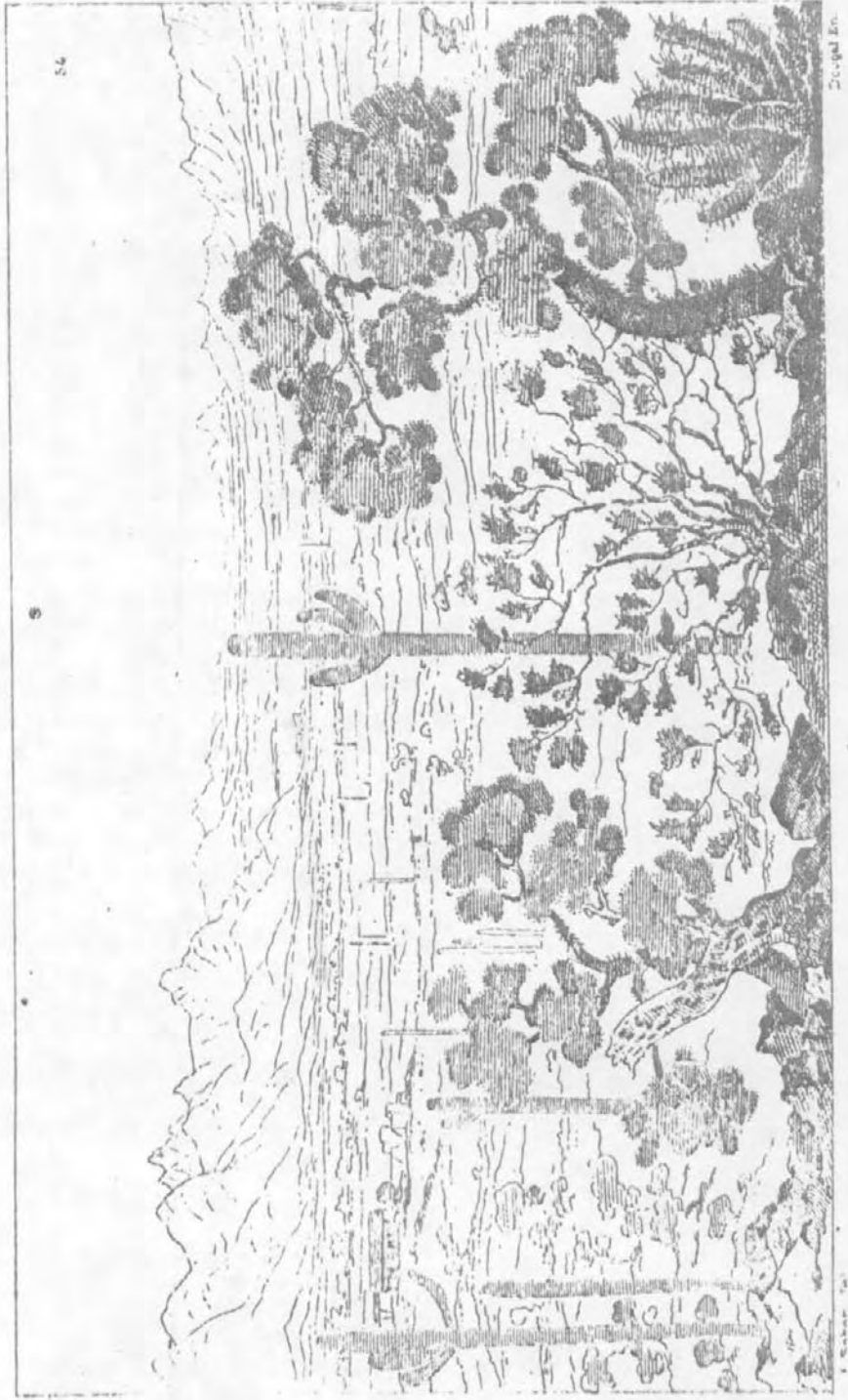


Illustration 11.

Quitobaquito in 1855.

From U. S. House of Representatives,
United States and Mexican Boundary Survey. . . .
H. Ex. Doc. 135, 34th Cong., 1st sess., vol. 1.



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Illustration 12.

Two views of Quitobaquito.

- Top: Looking south from Sestier grave.
Photo by William R. Supernaugh, 1951.
1. Adobe house in which Jose Juan Orosco lived and died in United States.
 2. Adobe house of Jose Juan Orosco in Mexico (irrigated land in lowlands between 2 and 4).
 3. Trees on west and south sides of pond.
 4. Buildings of Border Patrol camp.
 5. Part of one corral stockade.
 6. Washes from springs that are just left of picture.
 7. Grave of Jose Lorenzo Sestier.

Bottom: Houses of Jose Juan Orosco.
Photo by Frank Pinkley, ca. 1935.

Courtesy of Wilton E. Hoy.

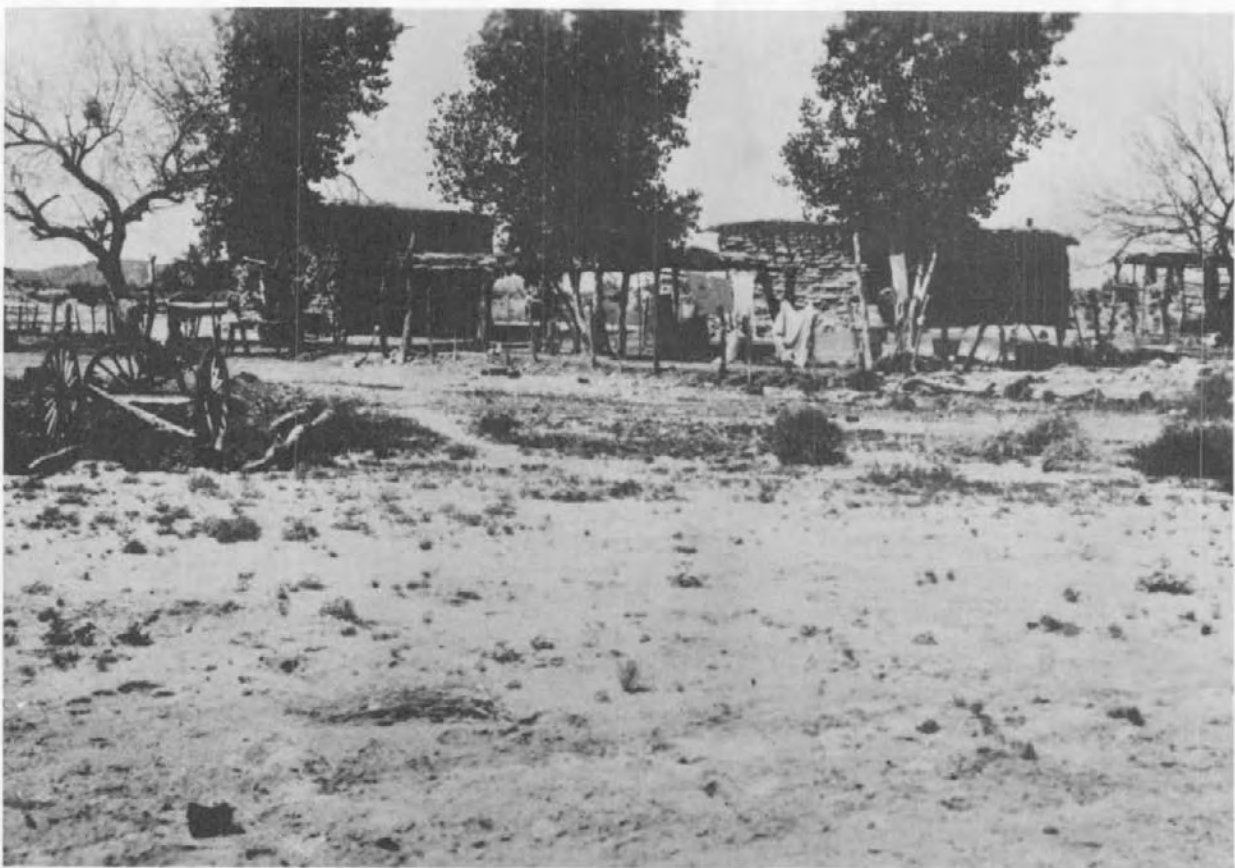
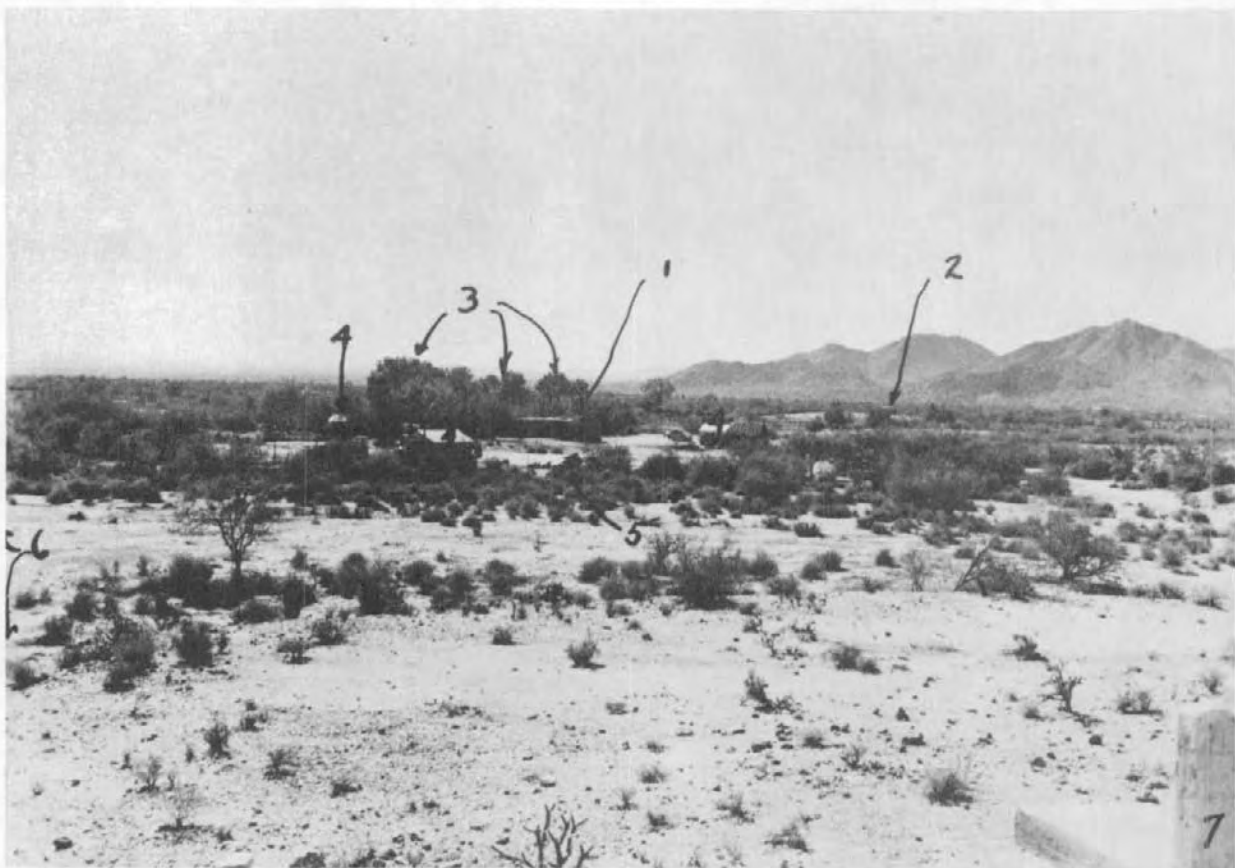


Illustration 13.

Top: The Orosco home at Quitobaquito.
Organ Pipe Cactus National Monument.

Bottom: Ruined adobe houses at Quitobaquito, 1954.
Taken by Moulton B. Smith.

Courtesy of Wilton E. Hoy.

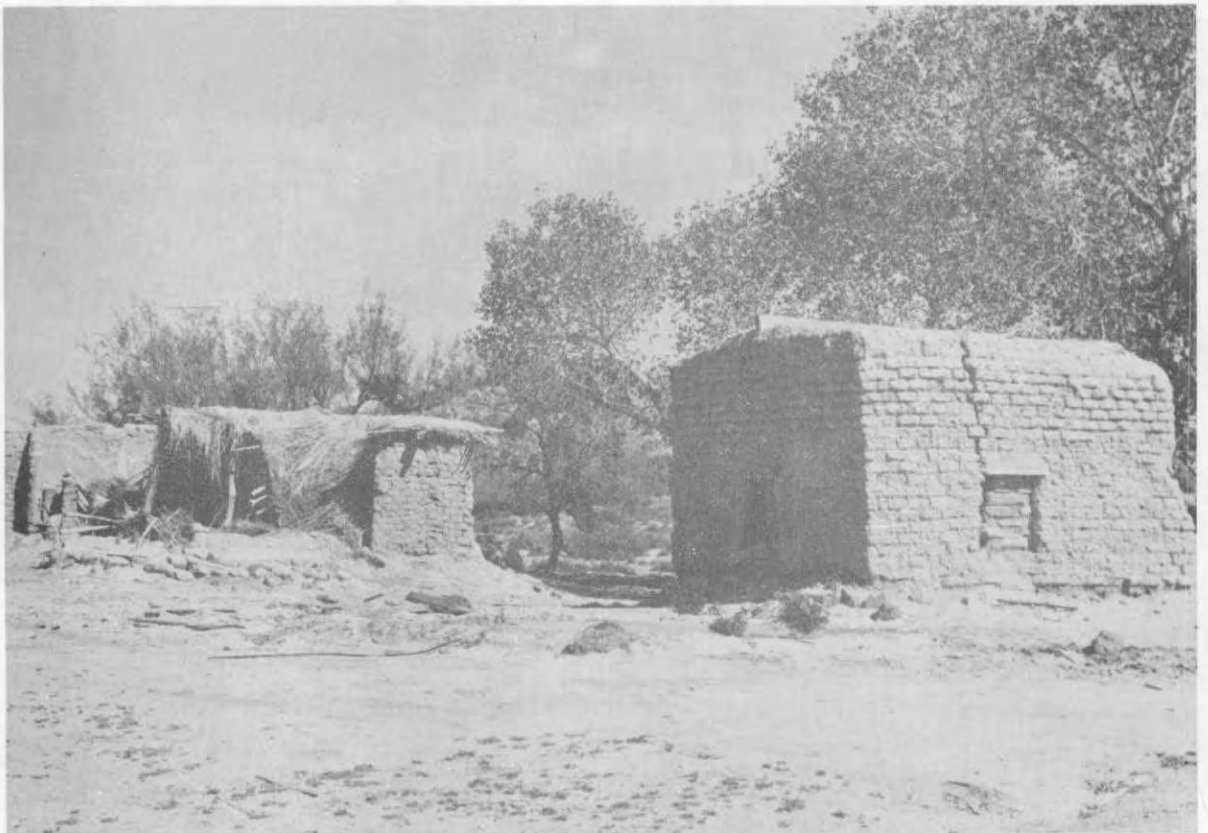


Illustration 14.

Wall's Well in 1907. Ajo Mountains,
Montezuma's Head, in background.

From William T. Hornaday, *Camp-Fires
on Desert and Lava* (New York:
Charles Scribner's Sons, 1908).

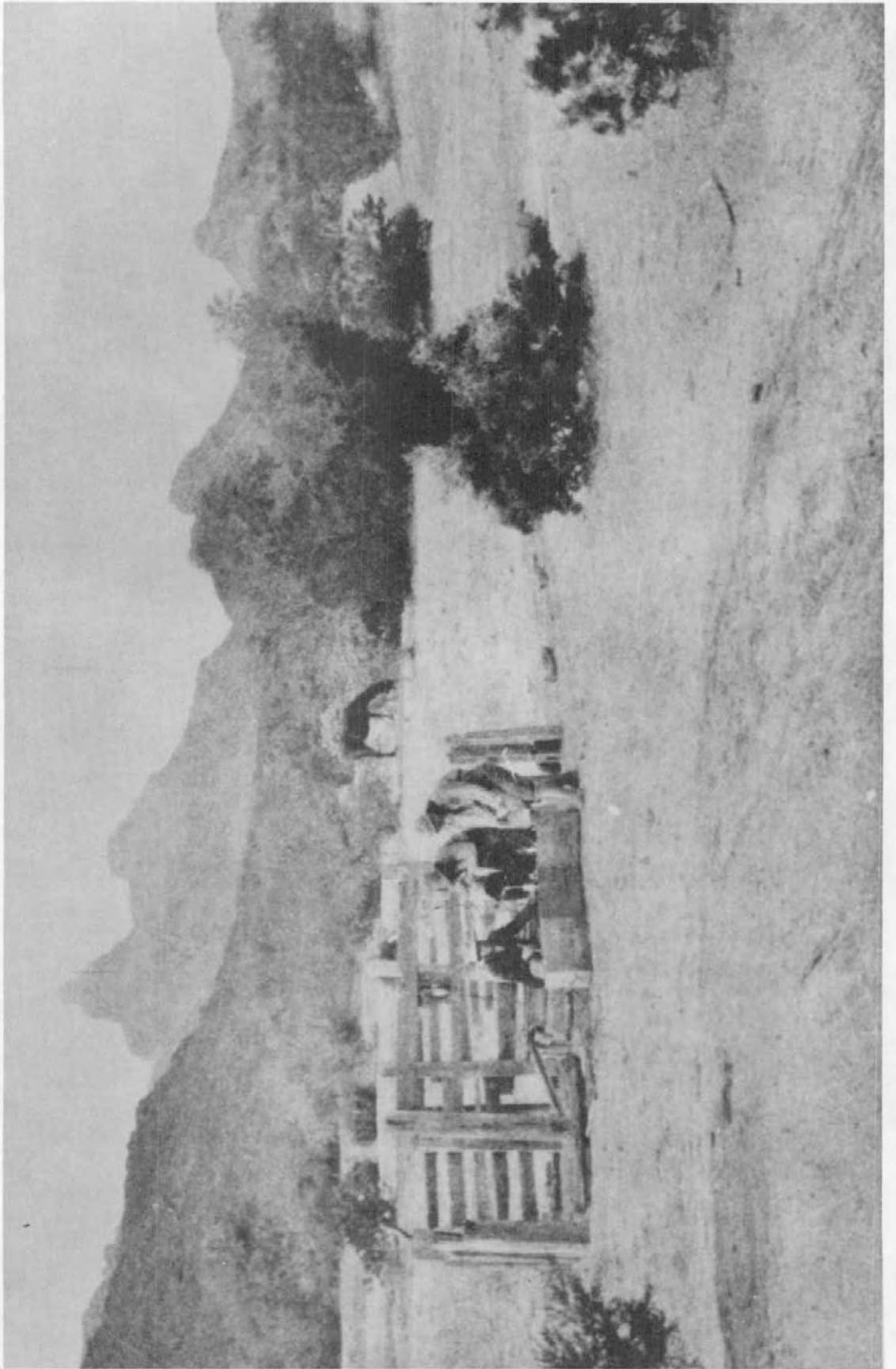


Illustration 15.

Top: Adobe houses at Wall's Well, 1907.

Bottom: "The ghost of a dead industry at
Wall's Well," 1907.

Both pictures from William T. Hornaday,
Camp-Fires on Desert and Lava (New York:
Charles Scribner's Sons, 1908).

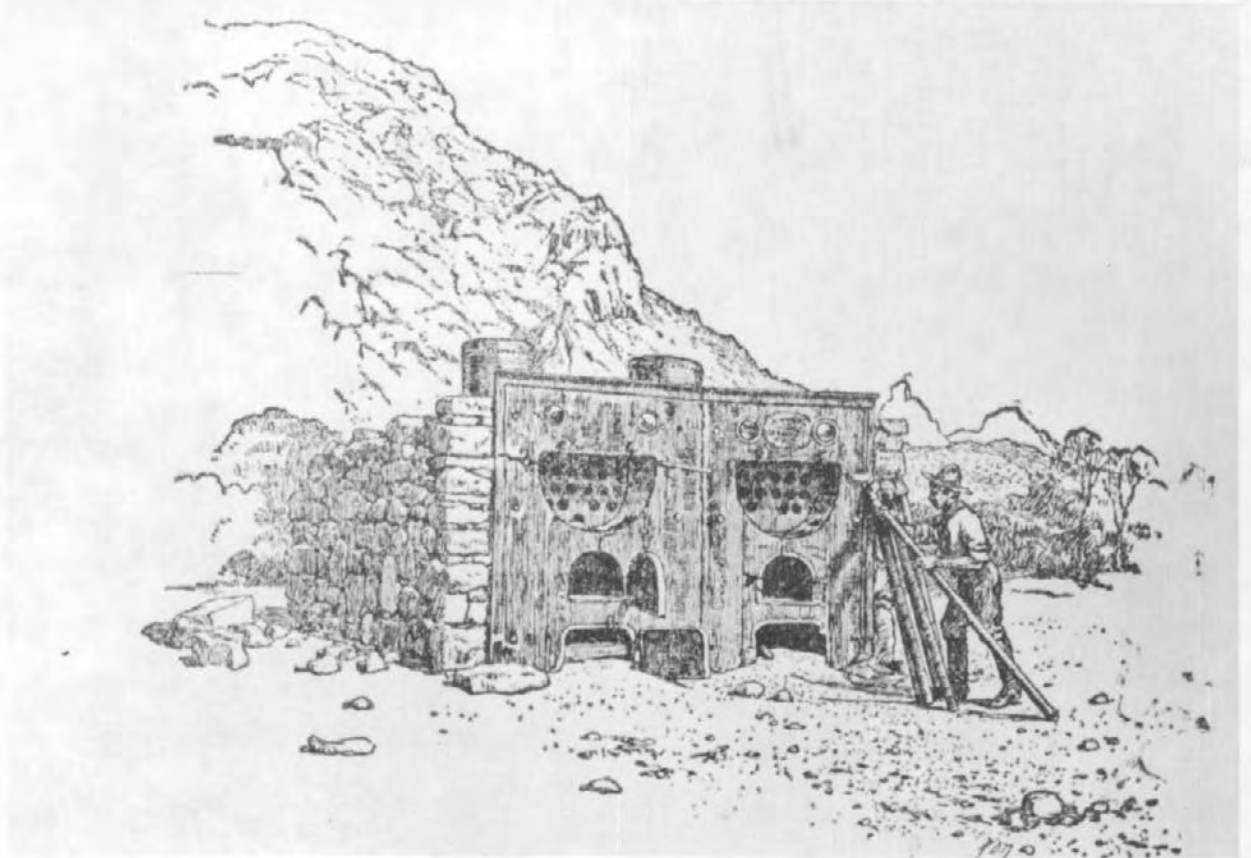


Illustration 16.

Top: Growler Mine, ca. 1935.

Bottom: Yellowhammer Mine, ca. 1935.

Photographers unknown. Courtesy of Wilton E. Hoy.



Illustration 17.

Left: Bedrock mortars near Quitobaquito.

Right: Grave of Jose Lorenzo Sestier at Quitobaquito.

Photographs by Jerome A. Greene, 1976.

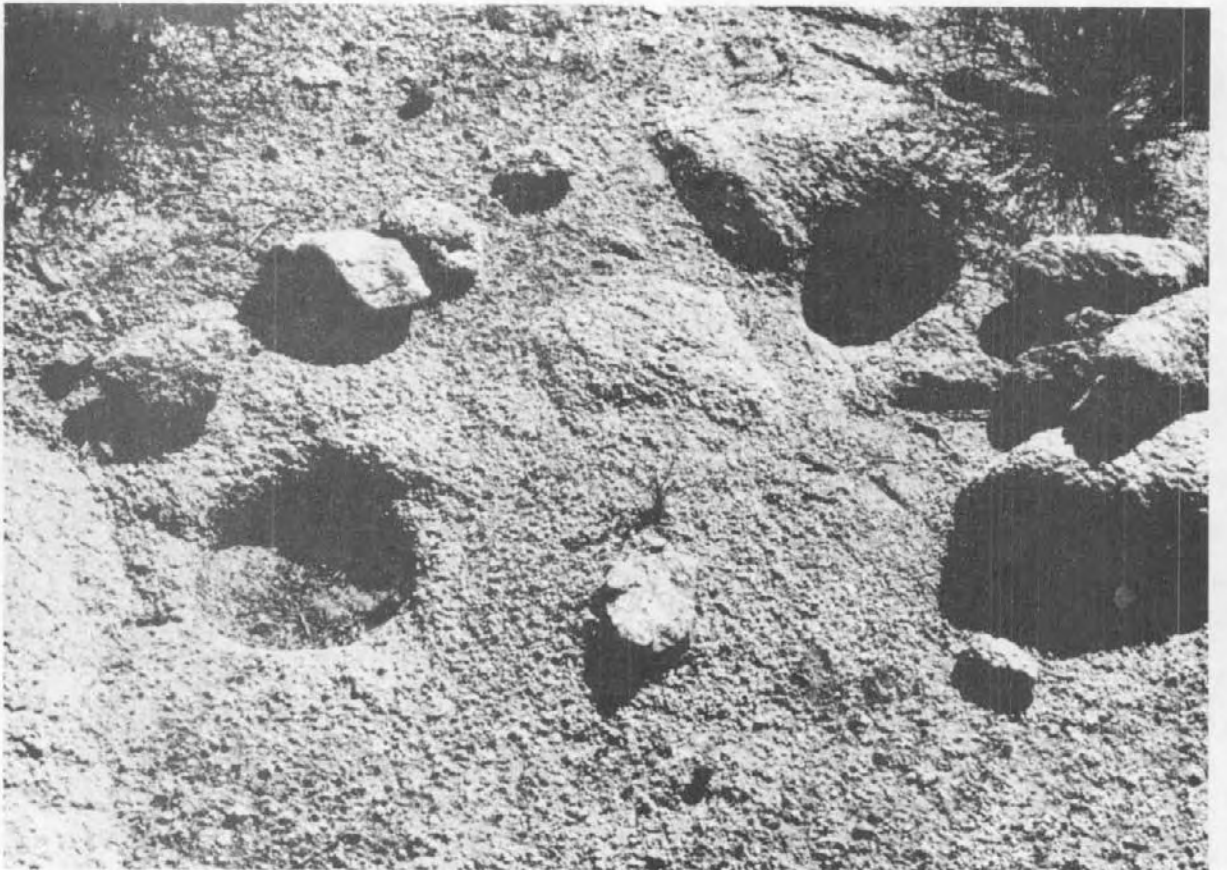
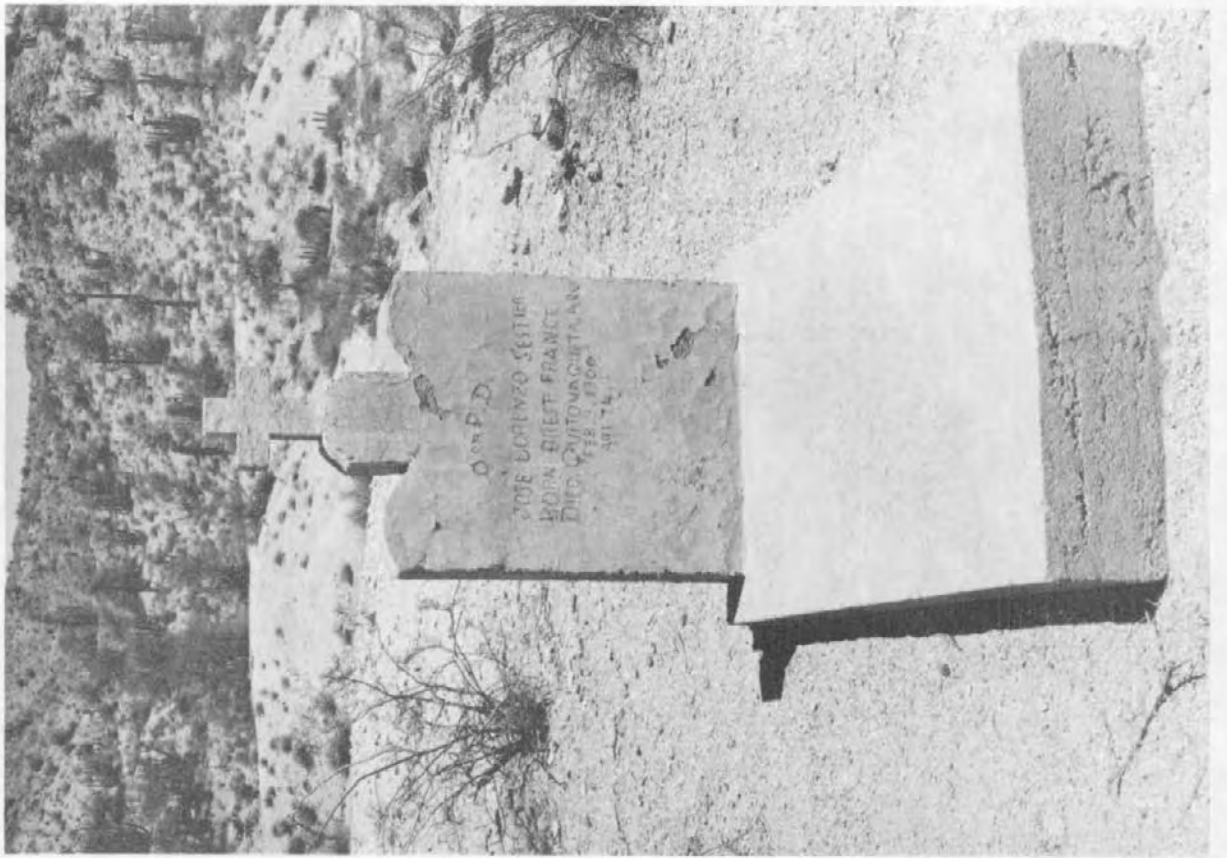


Illustration 18.

Top: Dos Lomitos ranch house.

Bottom: The railroad tie shack at Dos Lomitos.

Photographs by Jerome A. Greene, 1976.

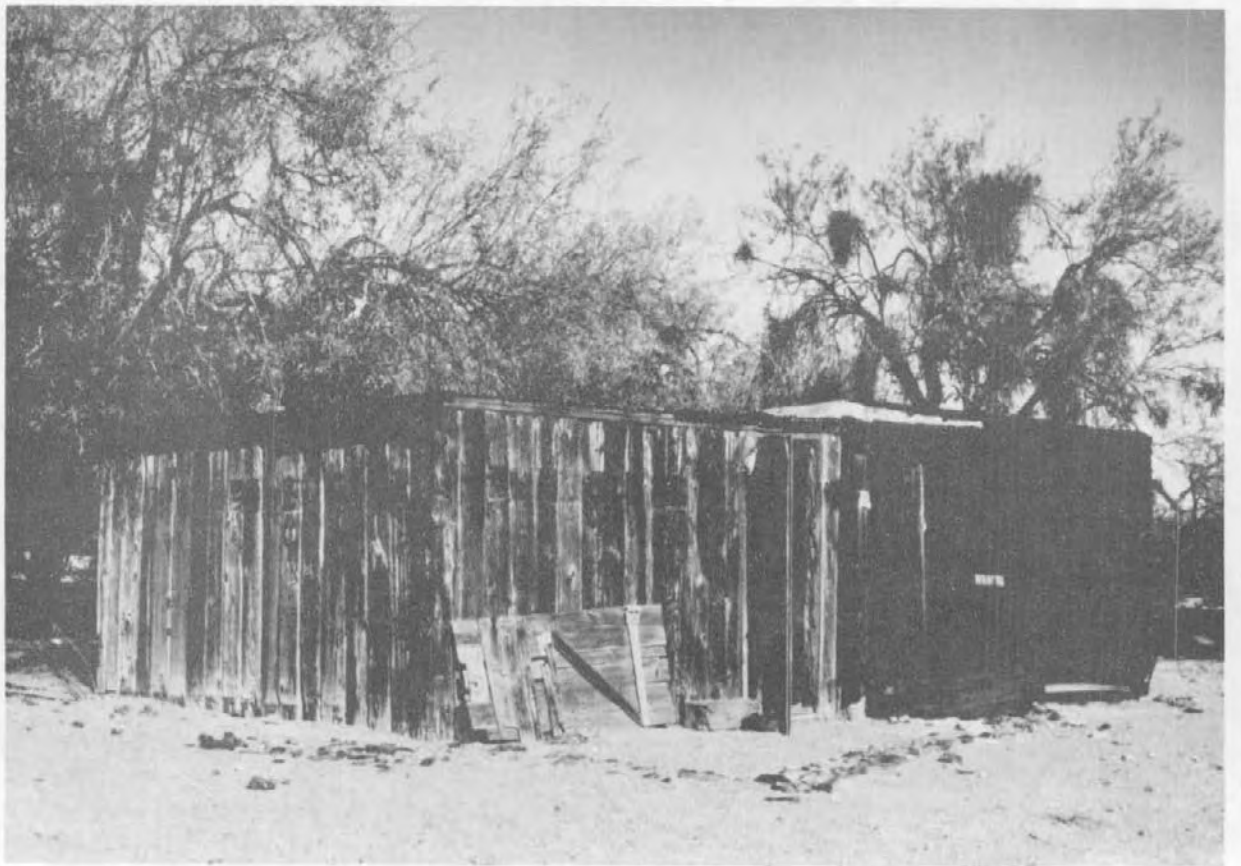


Illustration 19.

Top: Gachado Well and Line Camp.

Bottom: Interior of Gachado line shack,
showing details of ceiling construction.

Photographs by Jerome A. Greene, 1976.

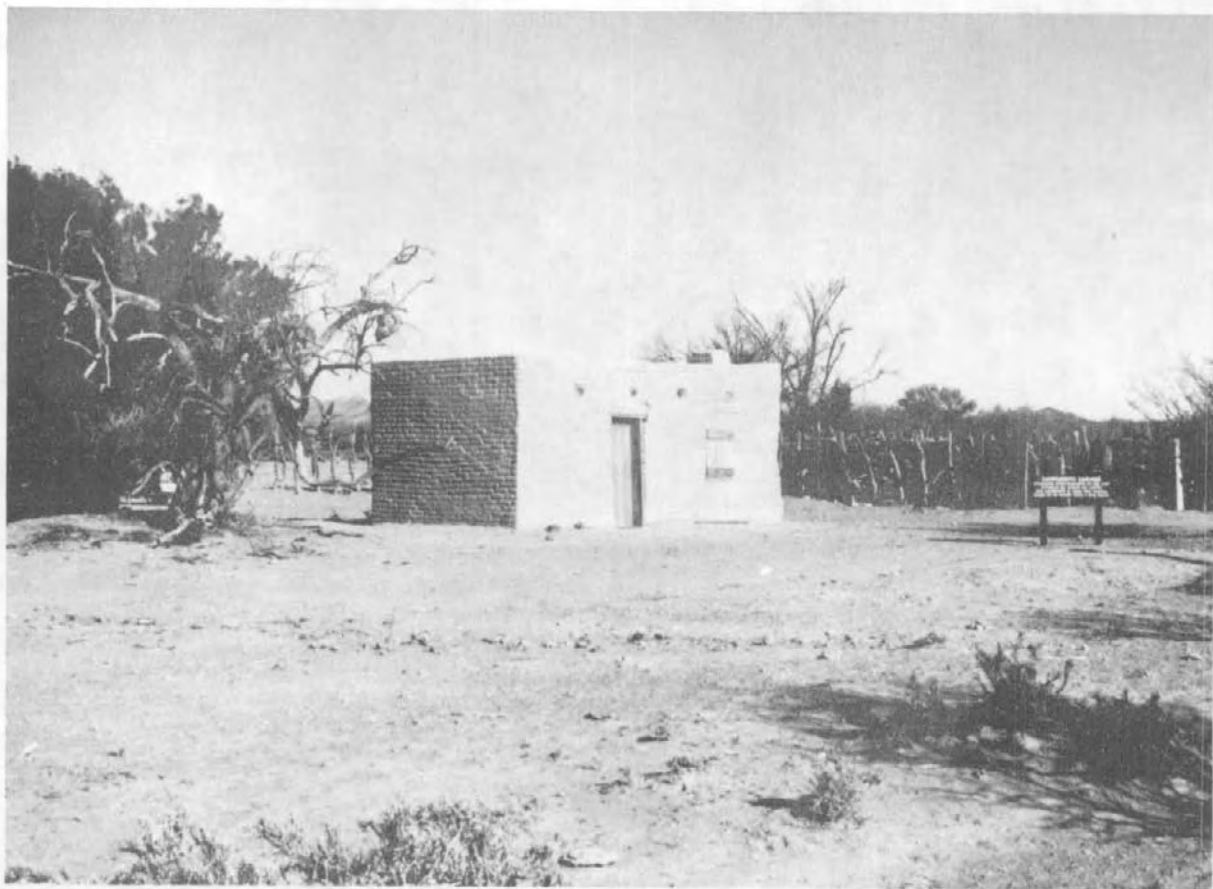


Illustration 20.

Top: Dowling Well and Ranch as seen from
approach road from the north.

Bottom: Dowling Well and Ranch, showing corrals.

Photographs by Kathy Liska, 1977.

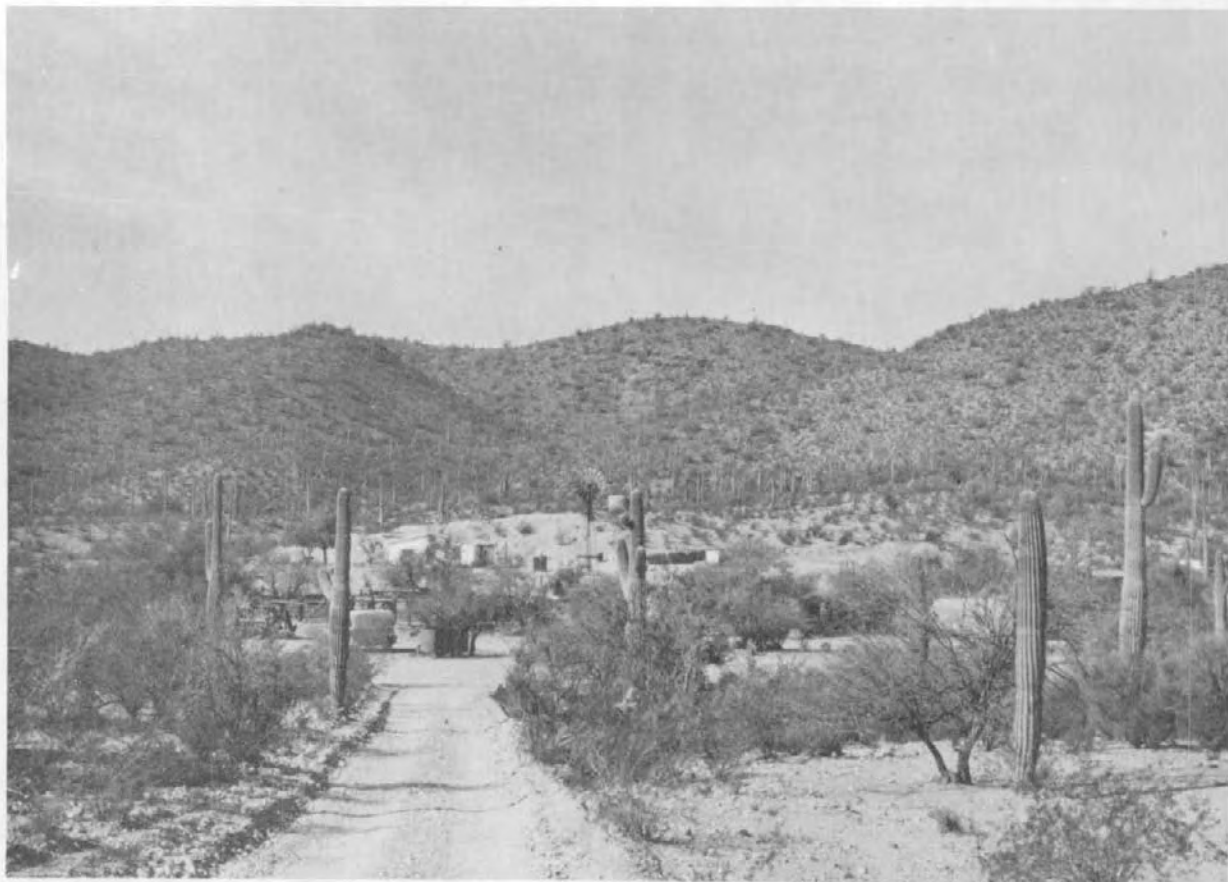


Illustration 21.

Top: Pozo Salado (Salt Well).

Bottom: Jacal with fireplace at Hocker Well.

Photographs by Jerome A. Greene, 1976.

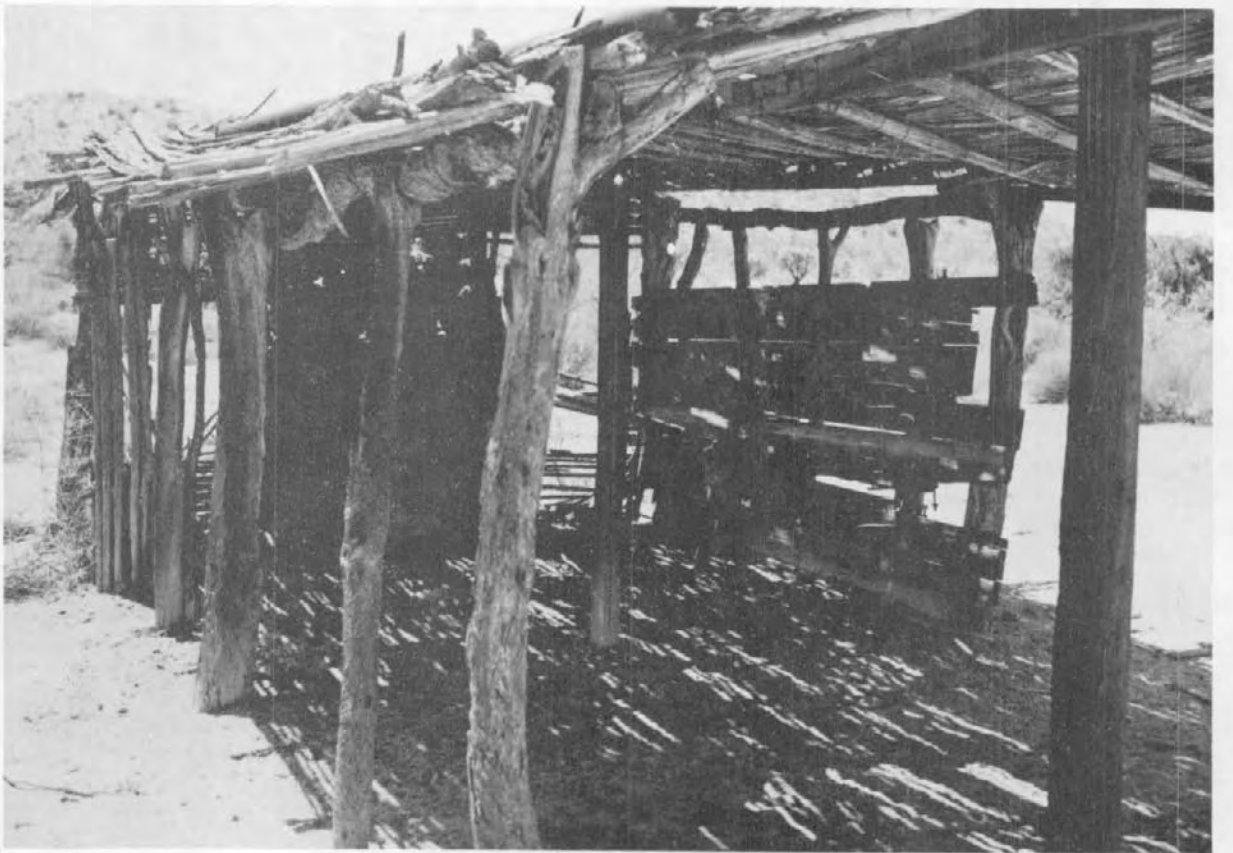


Illustration 22.

Top: Bonita Well.

Photograph by Jerome A. Greene, 1976.

Bottom: Cipriano Well, probable birthplace
of Jim Orosco.

Courtesy of Wilton E. Hoy.

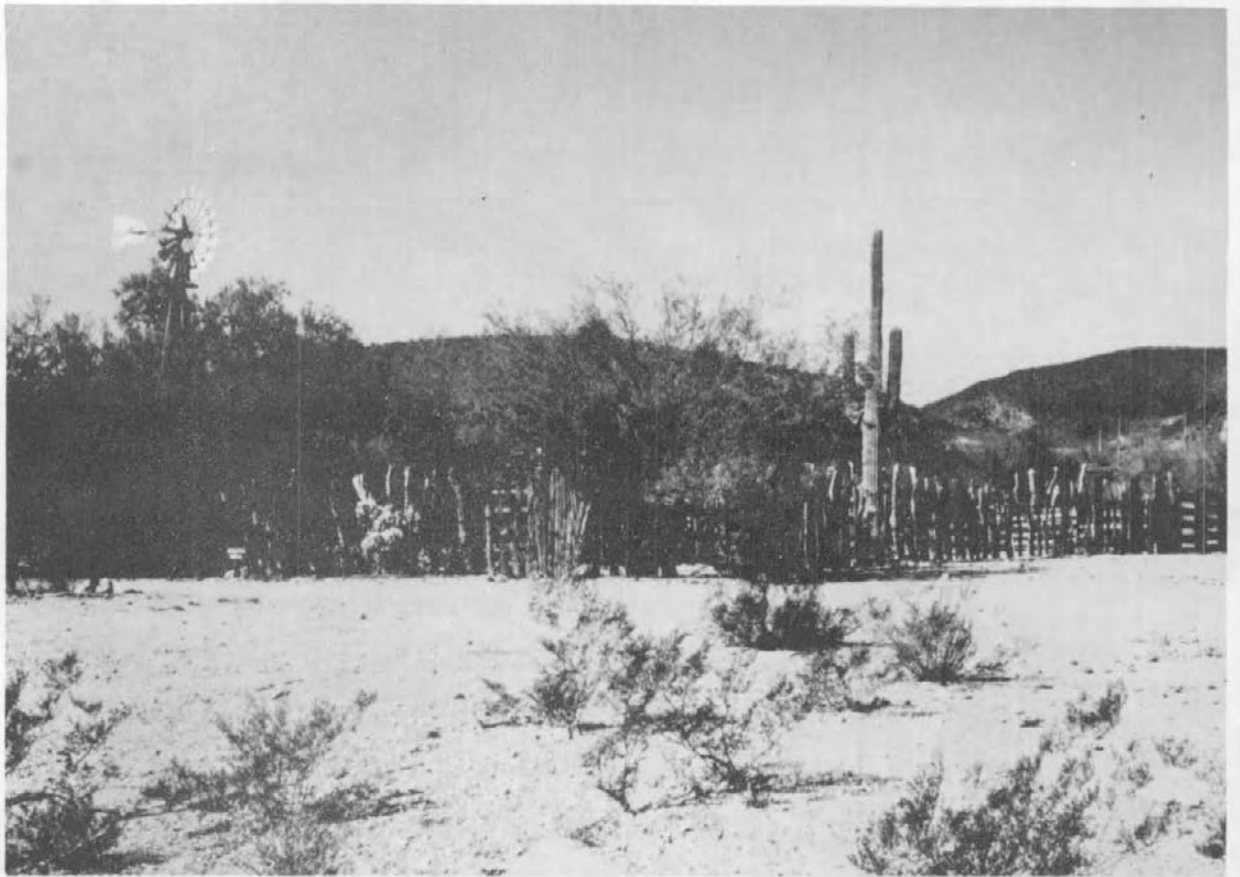


Illustration 23.

Top: Bates Well.

Bottom: Armenta's Place, showing ocotillo shack.

Photographs by Jerome A. Greene, 1976.



Illustration 24.

Top: View down Alamo Canyon.

Bottom: Adobe house in Alamo Canyon.

Photographs by Jerome A. Greene, 1976.

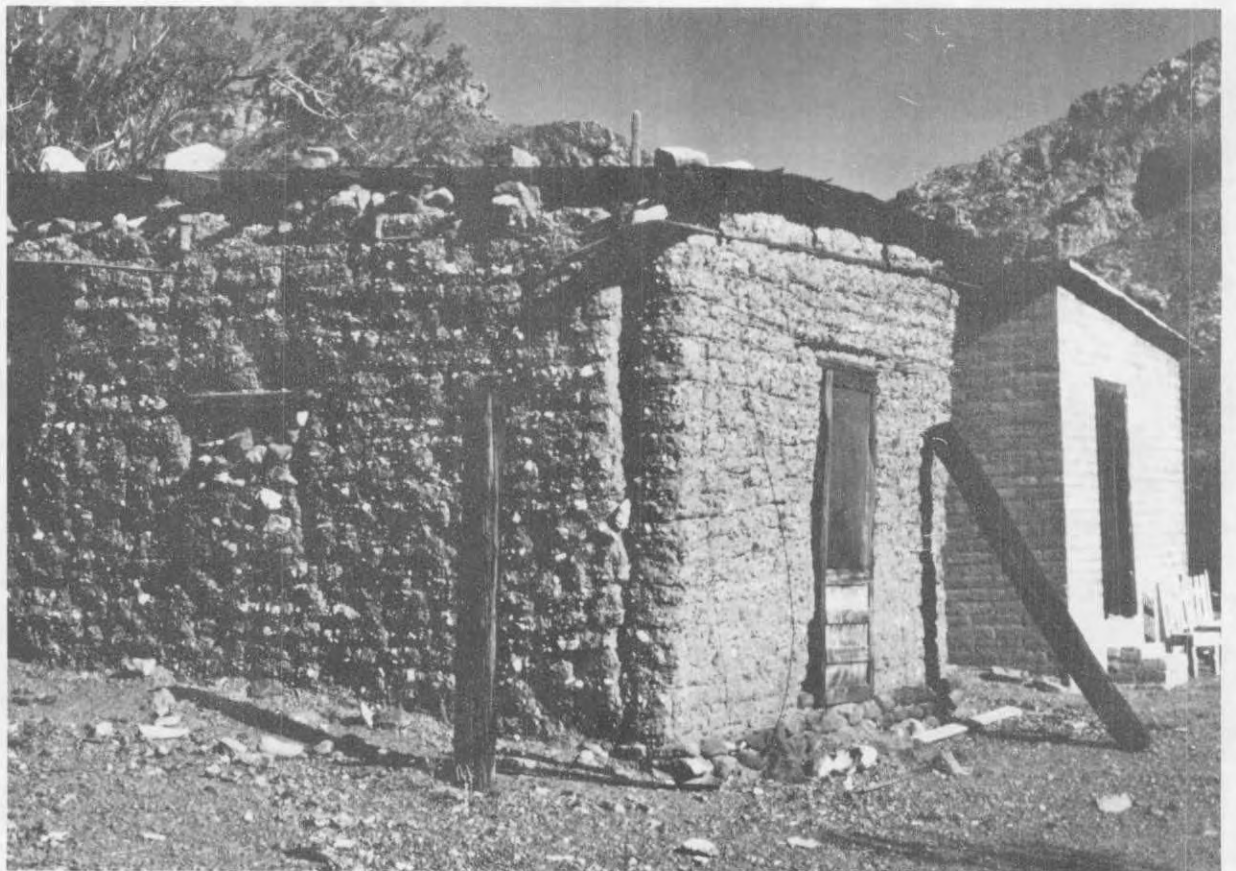
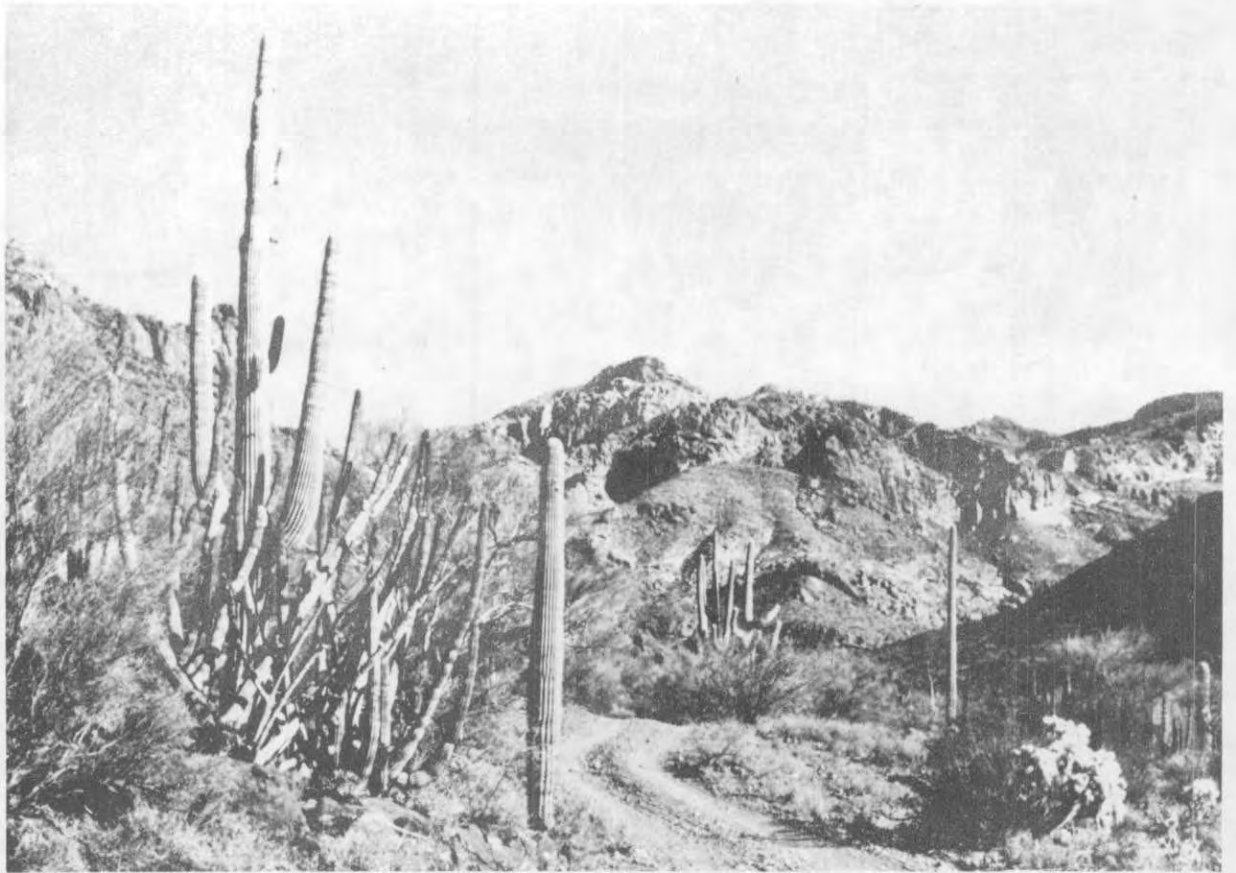


Illustration 25.

Top: Wild Horse Tank. Note concrete lip left
of center and above overhang.

Bottom: The "still" area beneath the overhang
at Wild Horse Tank.

Photographs by Jerome A. Greene, 1976.

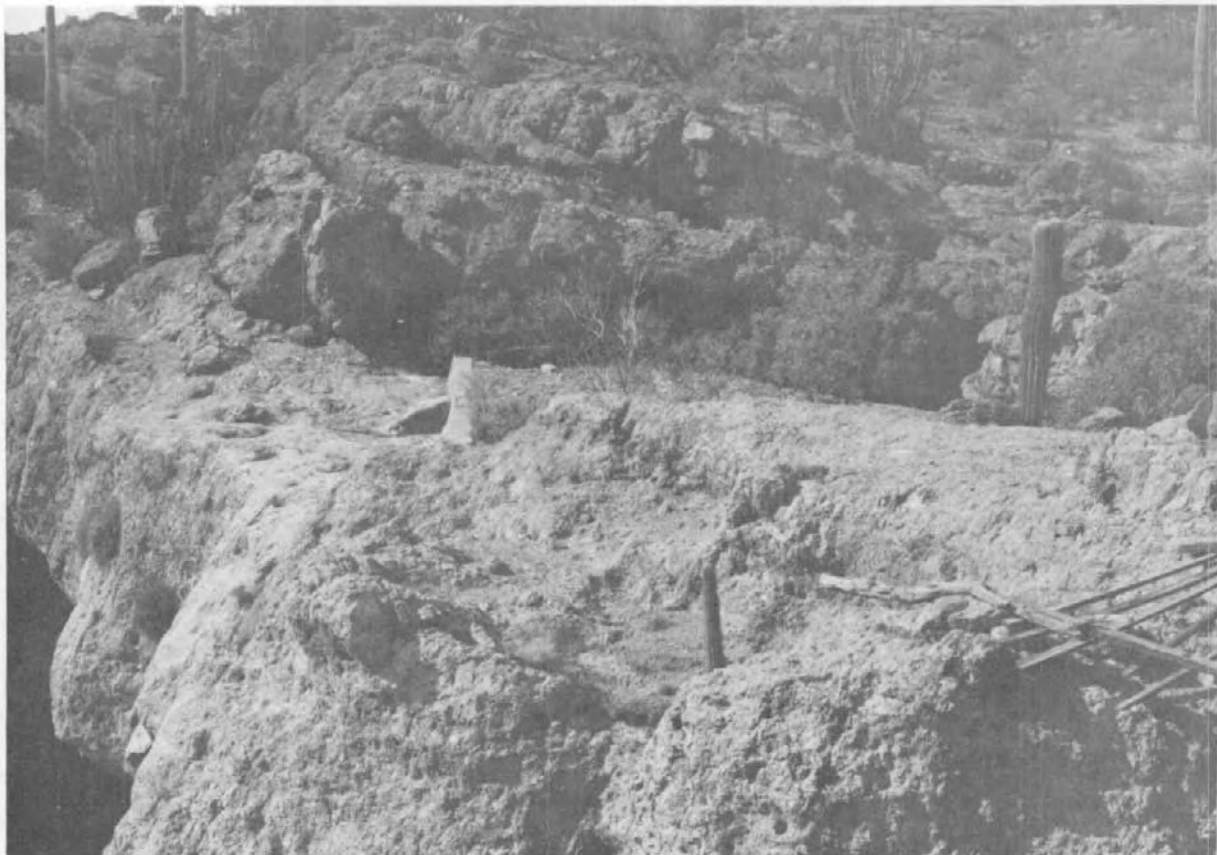


Illustration 26.

Top: View of Bull Pasture looking to the
south-southeast.

Photograph by Kathy Liska, 1977.

Bottom: Cement Tank.

Organ Pipe Cactus National Monument.



Illustration 27.

Top: Jefferson Davis Milton contemplates a
visitor, 1907.

From William T. Hornaday, *Camp-Fires on
Desert and Lava* (New York: Charles
Scribner's Sons, 1908).

Bottom: Site of the Milton Mine.

Photograph by Jerome A. Greene, 1976.

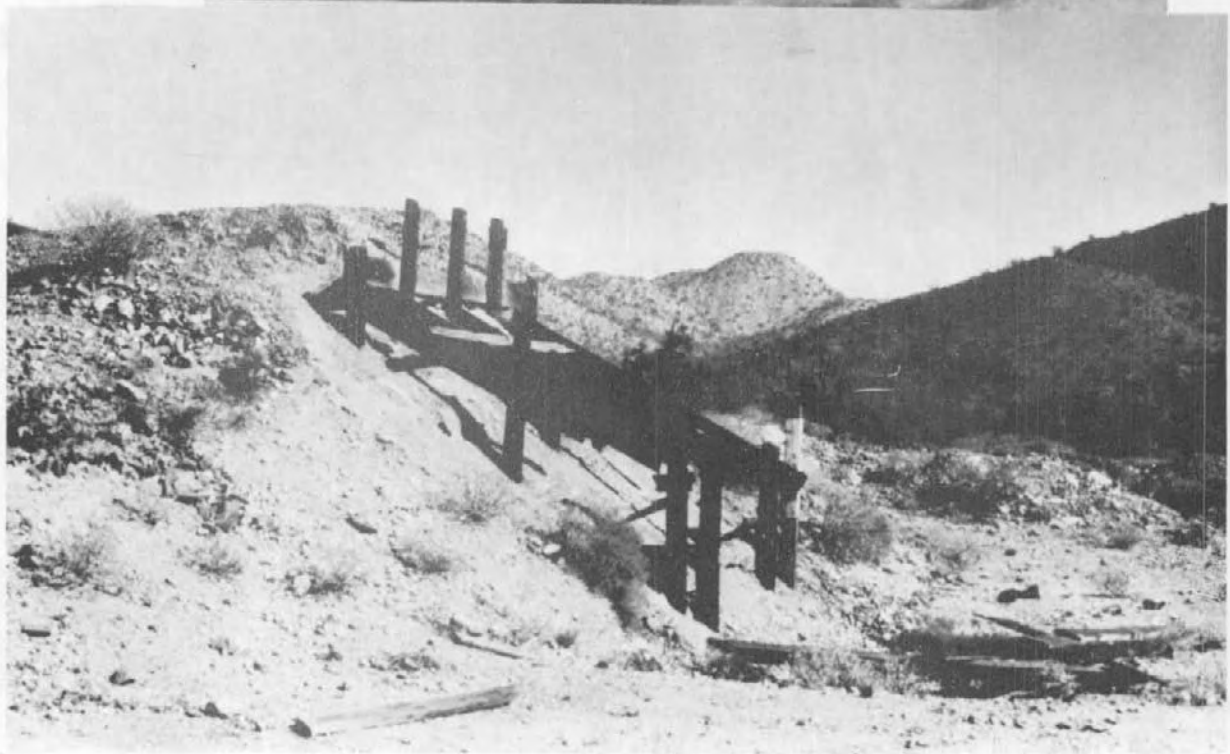


Illustration 28.

Two views of the Victoria Mine site,
showing the stone building.

Photographs by Jerome A. Greene, 1976.



Illustration 29.

Top: Site of the Growler Mine.

Bottom: Abandoned shaft at the Growler site.

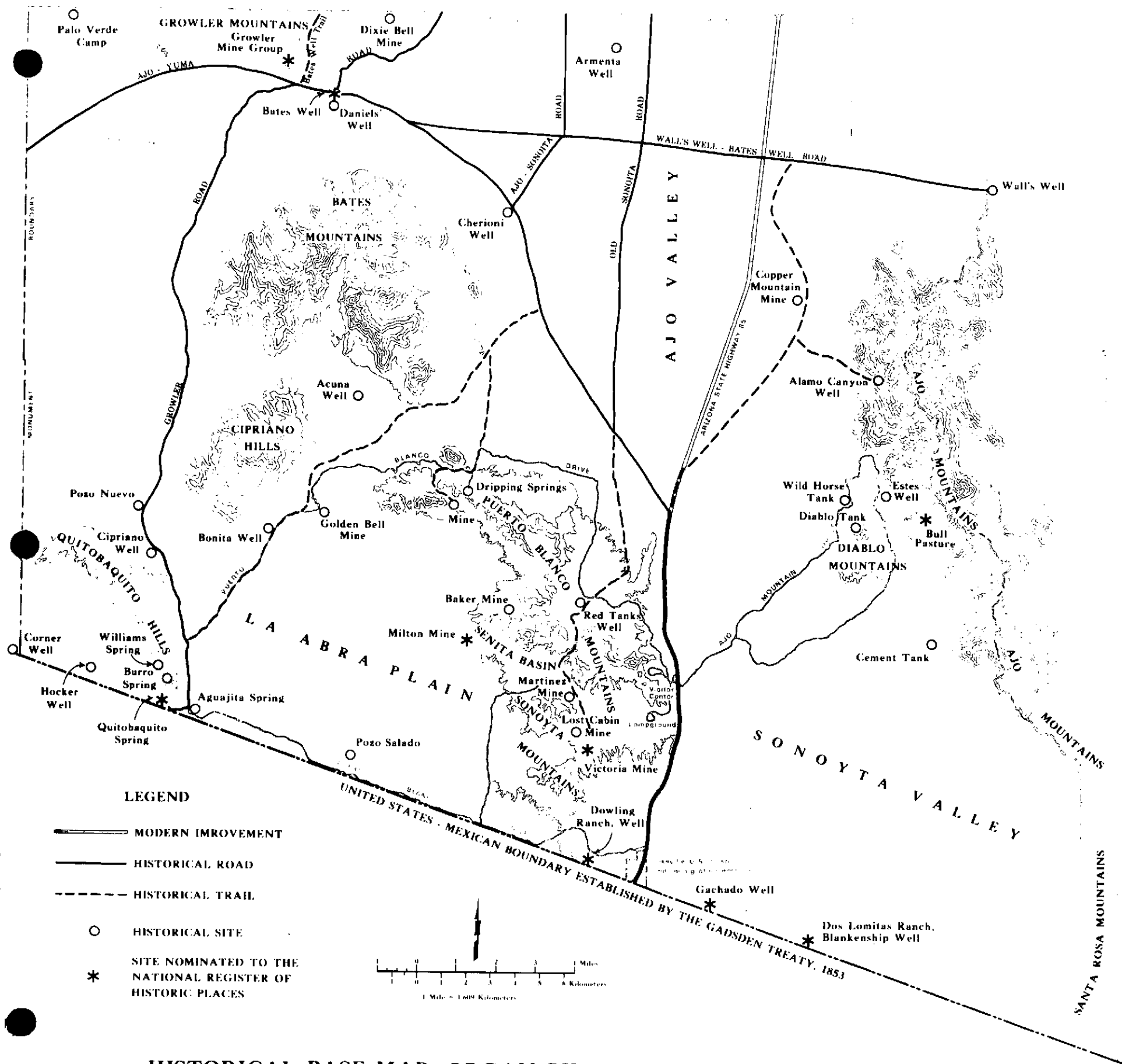
Photographs by Kathy Liska, 1977.



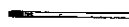

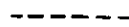


HISTORICAL BASE MAP

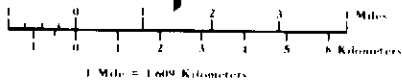
Compiled by Jerome A. Greene.

Drawn by Robert H. Todd.



LEGEND

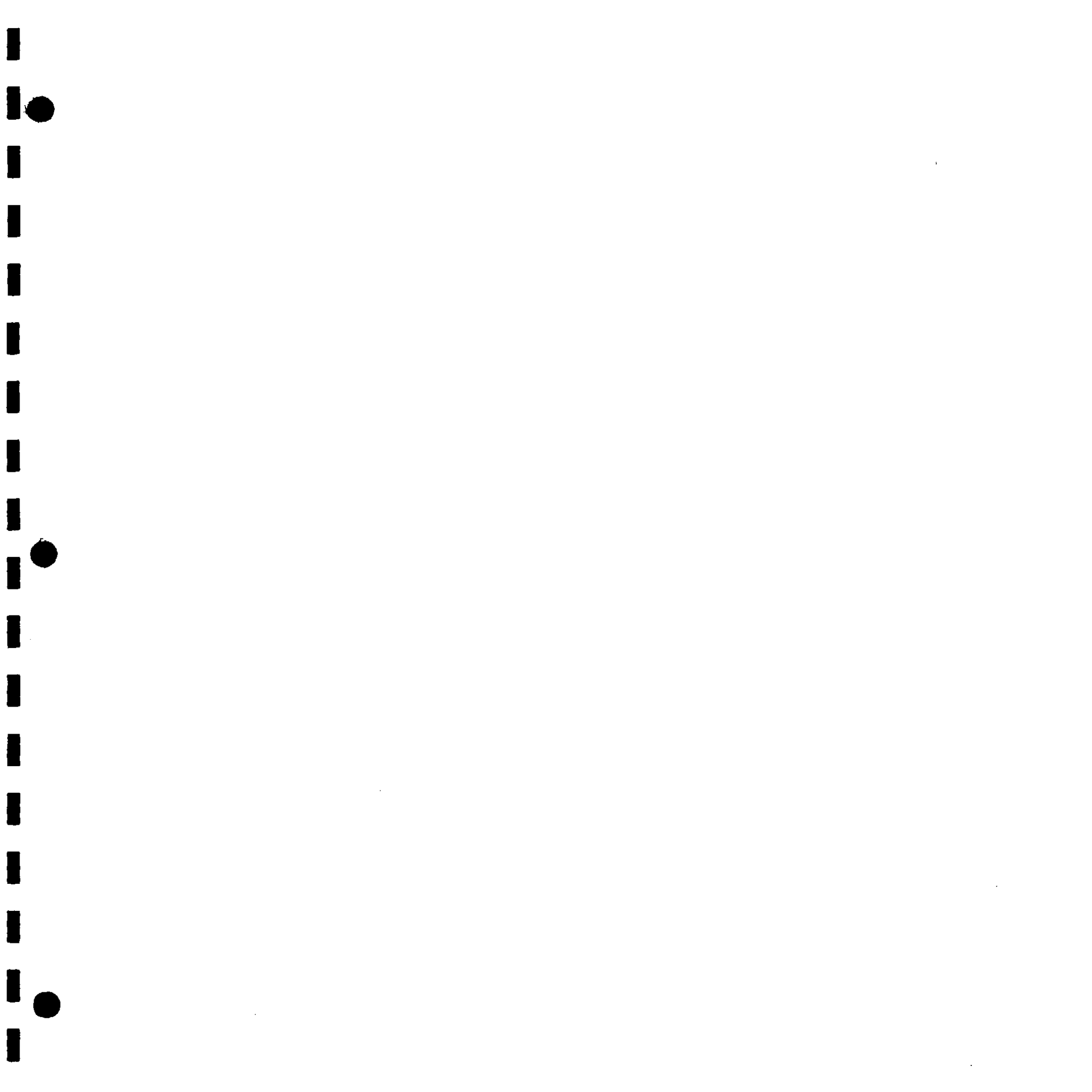
-  MODERN IMPROVEMENT
-  HISTORICAL ROAD
-  HISTORICAL TRAIL
-  HISTORICAL SITE
-  SITE NOMINATED TO THE NATIONAL REGISTER OF HISTORIC PLACES



**HISTORICAL BASE MAP, ORGAN PIPE CACTUS NATIONAL MONUMENT
ARIZONA**

UNITED STATES DEPARTMENT OF THE INTERIOR · NATIONAL PARK SERVICE

ON MICROFILM



As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The Department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

