

GOLD HILL MILL
Death Valley National Park
Warm Spring Canyon Road
Death Valley Junction
Inyo County
California

HAER CA-292
CA-292

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FIELD RECORDS

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
1849 C Street NW
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HISTORIC AMERICAN ENGINEERING RECORD

GOLD HILL MILL

HAER No. CA-292

- Location: The Gold Hill Mill is located on the west side of the Panamint Range in the southern portion of Death Valley. Inyo County, California.
- Date of Construction: 1934
- Present Owner: Department of the Interior, National park Service
- Present Use: Non-interpreted site in Death Valley National Park
- Significance: The Gold Hill Mill is associated with the operations of Louise Grantham, a mining entrepreneur and owner-operator of the highly successful Warm Springs Talc Mine. In addition to being a well-preserved example of Depression-era gold processing technology, the Gold Hill Mill and neighboring gold claims were involved in a 12-year long dispute between Grantham and a Western Shoshone man over the rights to water springs. In addition to symbolizing what had first brought Grantham to the area, the mill's history points to the role of the gold-mining industry in continuing the dispossession of Native American lands in the twentieth century.
- Historian: Paul J. White
- Project Information: The Gold Hill Mill was recorded as part of an initiative by the Historic American Engineering Record (HAER) to document North America's hard-rock mining heritage. HAER recorded the mill structure during the summers of 2000 and 2001, with funding provided by Death Valley National Park (DEVA) and HAER. The recording team consisted of architects Arin Streeter, Cristy Fletcher, Nancy Hung, and Johnny Yu, with large-format photography conducted by Gianfrance Archimede. Richard O'Connor, Senior Historian at HAER, supervised the project.

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INTRODUCTION

Visiting Warm Springs today, one would be hard pressed to consider the Gold Hill Mill or the claims it helped work as having warranted much importance in the mining history of Warm Springs Canyon. In addition to the mill's diminutive size, the two-mile stretch of the canyon between Warm Springs and its exit into Death Valley is visibly dominated by talc outcrops and the evidence of their working. From the road winding through the floor of the canyon, one passes alongside waste piles, ore bins, adits (some sized for a truck to drive through), and a large open pit mined after the mid-1970s. The Gold Hill Mill, in fact, comprises the only extant structure at Warm Springs not associated with talc mining, and its location in the middle of the canyon floor, removed from other mining features, serves only to heighten a sense of its aberrance. In contrast to these impressions of two very distinct landscapes, the history of Warm Springs indicates that gold mining was both contemporary with inseparable from the working of talc deposits. Surviving documents indicate that not only the company responsible for building and operating the mill worked the profitable "Big Talc" deposit, but also that the Gold Hill Mill performed an important role in winning a court case over Death Valley's most coveted resource: water.

The history of Western mining is replete with accounts of speculation and litigation over aquifers, watercourses, and groundwater sources. Although mining enterprises in arid regions often employed water-saving measures, the sheer scale of industrial demand made water supply a major factor in determining the profitability and feasibility of operations. As much as these conditions pitted companies against one another, mining enterprises in the arid southwest also found that most water locations had long seen use by Native peoples as sites of settlement, gardens, and temporary stopping places. Conflicts between Native Americans and mining interests over water rights happened early in the history of mining districts. These disputes rights happened early in the history of mining districts. These disputes continued through the nineteenth and twentieth centuries and show little indication of abating in the present day.¹ Historically considered, the contesting over water resources is part of a broader context in which industrial enterprises gained exclusive control over natural resources, resulting in the dispossession of the Native American land base.

The conflict over Warm Springs involved a dispute between a woman miner and a Western Shoshone man over ownership and leasing rights. Beginning in the 1930s, the dispute occurred during a period of revitalization throughout North America's gold fields,

¹ For a sense of the importance and complexity of Indian water rights in the American West, refer: Lloyd Burton, *American Indian Water Rights and the Limits of Law* (Lawrence: University of Kansas press, 1991); Robert Dunbar, *Forging New Rights in Western Waters* (Lincoln: University of Nebraska Press, 1983); Thomas R. McGuire, William B. Lord, and Mary G. Wallace (eds.), *Indian Water in the New West* (Tucson: University of Arizona Press, 1993); Donald Parman, *Indians and the American West in the Twentieth Century* (Bloomington: University of Indiana Press, 1994), 169-181; John Shurts, *Indian Reserved Water Rights: The Winters Doctrine in Its Social and Legal context, 1880s-1930s* (Norman: University of Oklahoma Press, 2000).

and also at a time when non-reservation Indians were increasingly pursuing legal title to their lands. This quarrel extended over a 12-year period and culminated in a trial held in the district court of Southern California. The judgment ruled in favor of mining interests, based partly on the occurrence of mineralization in the immediate vicinity of the springs. In spite of the gold deposits being marginal, the presence of gold mining infrastructure gave support to the claim's legitimacy.

The excellent preservation of trial documents, company correspondence, and physical evidence enables a detailed analysis of the Warm Springs dispute. In addition to informing about the conditions by which Native American dispossession was perpetuated in the twentieth century, the comparison and contrasting of evidentiary sources reveals how mining technologies, such as the Gold Hill Mill, served political ends, and how miners intentionally manipulated the mining landscape – both on the ground and on paper – to legitimate the control over non-mineral resources.

WESTWARD MINERS, WESTERN LANDS, AND THE “INDIAN PROBLEM”

By the turn of the twentieth century, litigation had so permeated the North American metal-mining industry that it is open to question whether entrepreneurs regarded property and resource disputes as extra-ordinary or expectable costs of business. In part, lenient resource policies had created abundant opportunities for prospectors, land speculators, and industrial capitalists to wrest enormous wealth from western lands. The intense competition for resources that this generated among Euro-Americans frequently evolved into conflicts between miners and between miners and farmers over various legal issues, debating which party held superior title, where rights to an ore body ended, what non-mineral resources were claimable in the interests of mining, and the extent to which users were liable for impacting the viability of other endeavors. For all the dizzying complexity of resource laws, loopholes, and paper generated by these disputes, at least one physical result was the accelerating rate at which western lands were divided into units of private property.²

With the establishment of private property and the conflict over individual ownership rights occurred under the pretext that western territories were free for the taking. An evident reality, however, was that all such land had been long occupied by Native peoples who expressed to intention of leaving. White settlers largely perceived Native Americans as an impediment to progress. As one means to eradicate this potential problem, the westward expansion of Euro-American enterprise in the nineteenth and twentieth centuries was underwritten by a sustained endeavor, on the ground and in

² Refer Patricia N. Limerick, *The Legacy of conquest: The Unbroken Past of the American West* (New York: W.W. Norton, 1987), 55-77; Donald J. Pisani, “‘I Am Resolved Not to Interfere But Permit All to Work Freely’: The Gold Rush and American Resource Law,” in James Rawls and Richard Orsi (eds.), *A Gold State: Mining and Economic Development in gold Rush California* (Berkeley: University of California Press, 1999) 123-148.

legislation, to divest Native Americans of their land base.³ The process of dispossession was neither straightforward nor did it occur as a singular event with evenly distributed impacts. Land loss occurred as a consequence of violent encounters as well as through the provisions of emergent resource laws and Indian policy.⁴ In all these aspects, the mining industry exerted an important influence, whether by instigating resource disputes or influencing legislation through political lobbying. Not surprisingly, mining companies ranked among the key beneficiaries of dispossession. For Native groups, the short and long-term consequences of this state of affairs were staggering.

Within a few years of James Marshall's famed discovery of gold nuggets at Sutter's Mill in 1848, the news of quick riches had drawn hundreds of thousands of rushers westward to prospect the Sierra Nevada Range, and ultimately to scour all regions of the "Golden State." Miners encountered Native American groups in all locations in California, yet the question of whether Native people held superior land rights was dismissed by the new arrivals on several grounds. Although seasonal patterns of land use were observable, whites perceived Native Americans as living a "nomadic" lifestyle with little attachment to the land (a perception that simultaneously denied the existence of indigenous systems of resource ownership and stewardship). Settlers also considered Euro-American land use to be more productive and intensive, and thus "beneficial," than Native uses. Travelers' reports, sketches, and newspaper editorials bolstered both of these notions by regularly depicting California Indians as degenerate, lazy, and "miserable" in character, and scarcely capable of securing their daily subsistence. Indeed most observable differences between whites and Native Americans – including physical appearance, diet, housing, religion, and sociopolitical organization – were interpreted by whites as indicative of the savagery of Indian peoples. California courts furthered this dehumanization by ruling Indian testimony invalid and by declaring that "vagrant" Indians (as determined by whites) could be sold into indentured servitude.⁵

Although settlers readily dismissed indigenous land rights, the fear of Indian attacks (both real and imagined) could not be so easily ignored. Native opposition to the intrusions of prospectors was frequent enough for violent outbreaks to occur in most mineral districts. In anticipation, if not in response, miners adopted a garrison mentality and frequently prospected as armed parties when venturing into new regions. Most violence occurred as skirmishes between individuals and small groups, although

³ For important discussions on the importance of understanding the multi-scalar entanglement of Euro-American and Native American lives throughout the historic period, refer James Axtell, "Colonial America Without the Indians: Counterfactual Reflections," *Journal of American History*, vol. 73, no. 4 (1987), 981-996; and Limerick, *The Legacy of Conquest*, 179-221.

⁴ Janet A. McDonnell, *The Dispossession of the American Indian, 1887-1934* (Bloomington: Indiana University Press, 1991).

⁵ David Goodman, *Gold Seeking: Victoria and California in the 1850s* (St. Leonards, Australia: Allen and Unwin, 1994), 15; James J. Rawls, *Indians of California: The Changing Image* (Norman: University of Oklahoma Press, 1984); E.D. Castillo, "the Impact of Euro-American Exploration and Settlement," *Handbook of the North American Indians: Vol. 8, California* (Washington D.C.: Smithsonian Institution Press, 1978), 99-127; Albert Hurtado, *Indian Survival on the California Frontier* (New Haven: Yale University Press, 1988), 100-124.

continuing Native resistance saw the escalation of violence in some counties to government-supported military expeditions.⁶ In combination with the devastation wrought by infectious diseases (continuing as the leading cause of death among Native Americans through the historic period), the California Gold rush marked an era of dramatic social, political, and economic change-reflected, in part, by drastic shifts in demographics. Between 1848 and 1860, the Native population of California plummeted from 150,000 to 30,000 people, while the non-Native population rose from approximately 10,000 to more than 350,000 residents.⁷ The affect of the gold Rush was even more extensive, however, when one considers the environmental consequences of a decade of mining activity. The extensive silt and detritus generated by placer mining (in which miners worked gravel deposits using high volumes of water), had clogged up streams and depleted salmon runs. The felling of wood to support mining operations demanded large acreages and reduced stocks of pine nuts and acorns used by Native groups as seasonal staples. The introduction of cattle, horses, and burros depleted grasses and seed crops otherwise used for food (as well as basketry), and spread diseases to local game herds already threatened by intensified hunting. As a matter of survival, many Native groups came to supplement subsistence activities by finding seasonal wage work.⁸

The high productivity of California's gold fields (with in excess of \$500,000,000 recovered by 1860) generated a broader interest in the mineral wealth of North America and accelerated the pace at which entrepreneurs pressed into Native lands. A quick succession of gold discoveries occurred on the heels of the California rush, including Oregon (1851), Washington (1852), Arizona (1857), Colorado (1859), Nevada (1859), Idaho (1860), British Columbia (1861), and Montana (1863). By the 1860s, prospectors had also identified lucrative deposits of silver and copper in many states.⁹ The rapid pace of expansion presented significant problems for legislators seeking to both prevent further bloodshed and regulate resource use. Federal policies, however, tended to supplement rather than challenge the various local systems developed by miners on the gold fields. In 1866, the general Mining Act officially declared all lands on the public domain open to mineral prospecting and patent. This Act permitted United States citizens (excluding most Native Americans until the passage of the Citizenship Act of 1924) to stake "valuable deposits" as lode (vein) or placer claims not to exceed 20 acres, and with a lesser acreage of non-mineral lands also allowable for situating camps and

⁶ By 1852, the California State legislature had passed two acts authorizing payment of over \$1,100,000 to reimburse private military forays against Indians (monies that were in turn largely reimbursed to the State by the federal government). Hurtado, *Indian Survival*, 106.

⁷ Hurtado, *Indian Survival*, 1. Although the rush of prospecting had wanted, by 1860 miners still made up 38 percent of the workforce (82,753 of 219,192). Daniel Cornford, "We All Live More Like brutes than Humans": Labor and Capital in the Gold Rush," In James Rawls and Richard Orsi (eds.), *A Golden State: Mining and Economic Development in Gold Rush California* (Berkeley: University of California Press, 1999), 82.

⁸ Brooke S. Arkuch, "The Great Basin Culture Area," in Molly Mignon and Daniel Boxberger (eds.) *Native North Americans: An Ethnohistorical Approach*, Second Edition (Dubuque, Iowa: Kendall/Hunt, 1997), 386-389.

⁹ Paula Mitchell Marks, *Precious Dust: The True Saga of the Western Gold Rushes* (New York: W. Morrow, 1994), 21-51.

other mine-related infrastructure. To legitimize and maintain ownership over mineral claims, the law required miners to post a claim notice at the site (including the names of locators, date of location, and a physical description of claim boundaries), file a copy of the notice at the county recorder's office within sixty to ninety days, and – subsequent to an 1872 amendment – complete at least \$100 worth of development work of the property each year. Having met these conditions, a mining claim conferred full property rights to the claimholder, including title to both subsurface and surface resources, and with the added benefit that the property remained tax exempt until patented.¹⁰

In application, the Mining Act endorsed the principle of prior appropriation - also termed, with unintended irony, “first in time, first in right.” This principle established an absolute priority of rights, in which the first party to claim an area had the full entitlement to the enjoyment of the property. Although first applied to mineral deposits, settlers soon used first in time, first in right to resolve disputes over agricultural lands, timberlands, and less discrete resources such as rangelands, oil reserves, and water. By the 1870s, court decisions indicate that this principle had become the preeminent resource law of the West.¹¹ If the establishment of private property and the ability to exclusively own resources had quelled some of the violence occurring between prospecting parties on the gold fields, these factors worked only to intensify the jostling for land, property speculation, and litigation over mineral deposits. Knowledge of applicable federal, state, and provincial mining laws rapidly became essential for prospectors, but even a good familiarity with the regulations for staking and registering claims did not prevent the escalation of court trials through the latter half of the nineteenth century.¹²

The vast tracts of non-reservation land that the Mining Act officially opened up for mineral exploration did little to dissuade the steady encroachment of miners onto Indian reservations – in large part because the lands made available by the Mining Act were generally the same lands that miners had already felt entitled to trespass. Miners and farmers viewed reservations as locking up valuable resources to the extent that simply the rumors of wealth often spurred prospectors to invade reservation territory (two well-known cases being the invasion of Sioux lands in the Black Hills, South Dakota, and Ute reservations in Colorado during the 1860s).¹³ The constant pressure for Indian lands

¹⁰ *General Mining Law*, May 10, 1872. United States Code Annotated, XXX, Sec. 21; Pisani, “I Am Resolved Not to Interfere,” 123-148.

¹¹ Donald J. Pisani, *Water, Land, and Law in the West* (Lawrence, Kansas: University of Kansas Press, 1996), 1-6; Limerick, *The Legacy of Conquest*, 71-73.

¹² One indication of the importance of mining law for a prospector is apparent by the early dissemination of claiming laws in handbooks and gazettes. See, for instance: E. Hepple Hall, *the Great West: Travellers' [sic], Mines', and Emigrants' Guide and Hand-book to the Western, North-Western, and Pacific States and Territories* (New York: Appleton and Co, 1865); James Redpath, *Hand-book to Kansas Territory and the Rocky Mountains' Gold Region Accompanied by Reliable Maps and a Preliminary Treatise on the Pre-emption Laws of the United States* (New York: J.H. Colton, 1859); John Rockwell, *A Compilation of Spanish and Mexican Law in Relation to Mines, and Titles to Real Estate in force in California, Texas and New Mexico* (New York, J.S. Voorhies, 1851); Julius Silversmith, *A Practical Hand-book for Miners Metallurgists, and Assayers* (New York: Office of the American Mining Index, 1866).

¹³ Delos S. Otis, *The Dawes Act and the Allotment of Indian Lands* (Norman: University of Oklahoma Press, 1973 [1934]), 13.

and the evident failure of the federal government to protect reservation lands altogether with private property, and in which Indians would be assigned individual farms. To policy makers, this action conferred the double advantage of freeing up vast areas of “unused lands” for white settlement and facilitating the conversion of American Indians into American citizens through the Jeffersonian notion that private property and agriculture promoted civic virtue and individual autonomy.¹⁴ For capitalists, such proposals promised renewed opportunities for tidy profits.

The passage of the Dawes Act in February 1887 permitted the division of reservation lands into individual allotments for farming and grazing purposes. The size of Indian Allotments was modeled loosely after the Homestead Act of 1862, which had allotted 160 acres to household heads. Under Dawes Act provisions, 160 acres were to be assigned to family heads, 80 acres to single persons over eighteen years of age and orphans under eighteen, and half again to single persons under eighteen. Indians living on non-reservation land could also file for allotments, which varied in size from 40 acres for irrigable land, to 80 acres for nonirrigable land, and 160 acres for nonirrigable grazing land. All Indian Allotments were awarded as trust patents for 25 years. The land transferred to fee patent status at the end of this period, giving the owner full title (including the ability to sell the property, and the obligation to pay taxes) and freeing the government from “all charge or incumbrance whatsoever” over Native peoples.¹⁵ The Burke Act of 1906 relaxed these provisions by permitting the Secretary of the Interior to issue fee patents to “competent” Indians before the 25-year trust period had expired.¹⁶ Under the Dawes Act, “surplus” reservation lands (i.e., lands in excess of those allotted to Native Americans) were transferred to government ownership and made available for purchase by outside parties.

Despite the conviction of reformers that the enforcement of private property was in the best interests of Indian welfare, both the Dawes and Burke Acts proved disastrous in application. A general lack of training, resources, and equipment dissuaded many Native Americans from farming their assigned allotments, and those that did frequently found (as had settlers under the Homestead Act) that 160 acres was insufficient to make agriculture and ranching economically viable on Western lands. Within a year of the Burke Act, approximately 90 percent of those acquiring fee patents had sold their land quickly and squandered the proceeds. In less than three decades, some 23 million acres of allotment land had transferred out of Indian ownership through direct sale to outside interests, fraud, foreclosure, and government confiscation from the failure to pay taxes.¹⁷

The boon for white interests was not unanticipated by legislators, lobby groups, and tribal leaders, nor was it limited solely to allotment sales. By the mid 1930s, a

¹⁴ Refer Kenneth Bobroff, “Retelling Allotment: Indian Property Rights and the Myth of common Ownership,” *Vanderbilt Law Review*, vol. 54, no. 4 (2001), 1559-1623; Otis, *The Dawes Act*.

¹⁵ *The Dawes Act*, February 8, 1887, United States Statutes at Large, XXVI, 794-796; Otis, *The Dawes Act and the Allotment of Indian Lands*.

¹⁶ *The Burke Act*, May 8, 1906, United States Statutes at Large, XXXIV, 182-183.

¹⁷ Bobroff, “Retelling Allotment,” 1609-1611.

further 60 million acres had been transferred out of Indian ownership under the designation of surplus land (and of which 22 million acres were opened for white settlement). The reservations targeted for allotment tended to be those where farmers and miners had exerted the greatest political pressure, with lobby groups proving powerful enough in some states to reduce the size of Indian land awards.¹⁸ The allotment process benefited the mining industry enormously on the grounds that mineral and timber lands on reservations undergoing allotment were deemed ill-suited for agriculture and duly transferred to the public domain. Allotment also provided mining interests with the opportunity to purchase larger land tracts from farmers without the need to patent individual claims. By June 1934, when the passage of the Indian Reorganization Act prohibited the further allotment of Indian reservations, the devastation caused by the Dawes and Burke Acts was unmistakable. From an already reduced estate of 138 million acres in 1887, Indian lands had shrunk to 52 million acres (a loss roughly equivalent to the state of Texas being redrawn as Kansas).¹⁹

In comparison to the assimilationist program preceding it, the Indian Reorganization Act presented a radical departure not only in Indian policy, but also in the close accord between Indian policy and industry lobbyists. In addition to ending allotment in severalty, the Act extended the right for Indian tribes to organize for self-government, gave preference to Indian candidates seeking employment in the Indian Bureau, authorized a yearly appropriation of \$2,000,000 for the purchase of additional lands (namely unsold "surplus" lands), and provided loans to Indians seeking higher education. In application, the Act vied with an array of other New Deal policies, each of which intended to direct federal monies to alleviate the effects of the economic recession, and not all of which were complementary. One consequence was that the original potential of the Indian Reorganization Act, as proposed by John Collier, the commissioner of Indian Affairs, was not realized. Lobbyists were still successful, for instance, in restricting the Act to certain tribes and in preventing opportunities for self government and financial aid from being extended to non-reservation Indians. Through these means, approximately 40 percent of Native Americans were prevented from forming tribal governments.²⁰ Direct concessions to mining interests were also evident in the text of the Act itself. Section 3 opened the Papago Indian Reservation to mineral entry and patent, with the stipulation that miners were to pay a yearly rental not to exceed five cents an acre to the United States Treasury for credit to the Papago tribe.²¹

¹⁸ Pressure from local whites prevented reservation Indians in New Mexico and Arizona from claiming outside lands when faced with inadequate water and grazing areas for livestock. McDonnell, *The Dispossession of the American Indian*, 15, 10-15, 88-89.

¹⁹ McDonnell, *The Dispossession of the American Indian*, 121.

²⁰ John Wunder, "Retained by the People": *A History of American Indians and the Bill of Rights* (New York: Oxford University Press, 1994), 67-70; Richard Lowitt, *The New Deal and the West* (Norman: University of Oklahoma Press, 1984), 122-137.

²¹ Miners could alternatively make a one-time payment of one-dollar an acre in lieu of patenting a claim. *Wheeler-Howard Act* {Indian Reorganization Act}, June 18, 1934. 48 Stat. 984, United States Code, XXV, Secs. 461-479.

The opening of the Papago Reservation in Arizona directly benefited the interests of gold prospecting and exploration. As experienced national, the combination of high (and rising) gold prices, reduced startup costs due to the recession, and the federal government's intent to amass a gold stockpile, gold mining was one of the few extractive industries not adversely affected by the collapse of the New York Stock Exchange in late 1929. In the early years of the depression, local relief officials actively encouraged unemployed citizens to try gold mining under the premise that "Every digger becomes one less candidate for a job on the outside."²² Many officials reportedly grubstaked families with funds sufficient for a one-way trip to the Western gold fields.²³ Newspapers further raised the interest of amateurs by publishing accounts of the rich strikes made by untrained individuals. The net effect was not altogether dissimilar from the gold rushes occurring some eighty years earlier. According to conservative estimates, around 50,000 people rushed to the gold fields in the 1931 season, but in 1932, and again in 1933, the number of prospectors likely exceeded 100,000 people. Among amateur diggers, the types of people drawn to the gold fields varied enormously. In addition to those recently unemployed from other professions, gold mining attracted people otherwise deemed unfit to work (including the elderly and infirm), and those who simply tried weekend prospecting for "a lark." About seventy percent of the rushers worked deposits in California.²⁴ Like their predecessors, many of the depression-era prospectors arrived with minimal knowledge of how to work gold claims. Their migration to former gold districts, however, meant that expertise and equipment was sometimes locally available. Of additional assistance, a variety of agencies, including national mining societies and journals, and state and federal agencies actively disseminated knowledge about mining methods and costs.²⁵

²² The quote "Every digger..." comes from a statement by the Idaho State Mining Inspector, printed in Anon. "Increasing Gold Prospecting Embraces Entire World; Many Strikes are Reported," *Engineering and Mining Journal*, vol. 132, no. 4 (1931), 182. For contemporary descriptions of the depression-era rush, refer Robinson Newcomb, Charles Merrill, and R.L. Kiessling, "Employment and Income from Gold Placer by Hand Methods, 1931-37," Works Project Administration, National Research Project, Report E-14 (Philadelphia, 1940); Charles Merrill, Charles Henderson, and O.E. Kiessling, "Small-Scale Placer Mines as a Source of Gold, Employment, and Livelihood in 1935," *Mineral Technology and Output per Man Studies, Report No. E-2* (Philadelphia, 1937). A more recent perspective is provided by Charles Miller, *The Automobile gold Rushes and Depression Era Mining* (Moscow, Idaho: University of Idaho Press, 1998).

²³ Newcomb et. al., "Employment and Income," 1. Grubstaking involved the furnishing of supplies to a prospector on the promise of share in the discoveries.

²⁴ These population estimates by mine inspectors (refer Newcomb et. al., "Employment and Income," 4-7) were extrapolated from observations of mining districts, and are more reliable than official counts which recorded only profitable work on legal claims. According to official U.S. bureau of Mines statistics, only 800 placer mines operated in California in 1930, the number decreasing in the following year, but rising to more than 1,700 operations in the 1934 season [U.S. Bureau of Mines, *Minerals Yearbook, 1930-1934* (Washington, D.C.: GPO, various pp.)].

²⁵ From 1931-1933, for example, the California Division of Mines and Geology instructed 3,000-4,000 people on basic placer mining techniques and printed several thousand copies of a how to mine manual. During the peak years of the rush (1932-1934), agency staff answered up to 200 personal inquiries per day in each of their San Francisco and Los Angeles offices and responded to around 1,000 letters per month. Similar efforts were conducted by agencies in other western states. The federal Bureau of Mines ran instruction classes and issued several information circulars on placer mining methods geared to the

The diffusion of prospectors through Western lands during the 1930s once again brought questions over land rights to the fore because central conflicts between Native Americans and mining interest remained unresolved. The contexts, in which conflicts occurred, however, were increasingly complex. The Indian Reorganization Act, for instance, enabled some tribes to regain title to surplus lands, and it also vested tribal governments with rights to “prevent the sale, disposition, lease, or encumbrance of tribal lands.”²⁶ Following the Citizenship Act, Native Americans could also legally stake and own mineral claims on “public” lands. While these developments ostensibly provided more opportunities for Native Americans to reclaim title over mineral lands, the course of dispossession was not so easily turned. In land disputes, Native people faced a court system in which the principles of private property and prior appropriation (in many senses, the mechanisms of land loss) had been firmly entrenched for six decades. Native Americans also battled institutionalized prejudices that defined “Indian-ness” according to livelihoods rendered either unviable or incapable of being re-established by the events of the previous decades. For these and other reasons, the possibility for continuing dispossession was far from concluded.

DISPOSSESSION IN DEATH VALLEY

If the distinctions that national resource and Indian policies made between lands of agricultural and mineral character implied that mining and farming interests were easily separable, the reality on Western lands differed markedly. A fundamental problem was that the viability of different land uses could depend upon the ability to access the same resource. This conflation of interest occurred frequently in arid environments, such as Death Valley, where a much needed resource, water, existed only in limited supply. Although the Death Valley region actually contains several hundred springs, most sites occur as underground seeps and only a few can be considered drinkable and of sufficient volume to support domestic, agricultural, and industrial uses. One historical consequence was that the locations where Euro-Americans chose to settle or elected to draw water for domestic and industrial purposes were also the places that Native American groups had long used for seasonal camps and temporary stopping places (archaeological evidence, in fact, indicating that people have chosen to live in the Death Valley region for some 10,000 years).²⁷ In this manner, spring locations became sites of potentially competing interests throughout the historic period. This co-occurrence of different land uses tangibly affected both Shoshone livelihoods and the character of mining endeavors.

prospector and small-scale miner. Miller, *The Automobile Gold Rushes*; Newcomb et. al., “Employment and Income.”

²⁶ *Wheeler-Howard Act* [Indian Reorganization Act], June 18, 1934, Section 16.

²⁷ Refer, Alice Hunt, *Archaeology of the Death Valley Salt Pan, California* (Salt Lake City: University of Utah, 1960); William J. and Edith Wallace, *Ancient Peoples: Cultures of Death Valley National Monument* (Ramona: Acoma Books, 1978).

When the California Argonauts first traversed the arid southwest en route to the gold fields, approximately 50-100 Western Shoshone occupied the northern and central portions of Death Valley. The Death Valley Shoshone (also referred herein as the Timbisha Shoshone²⁸) based their subsistence primarily on the gathering of vegetal foods available seasonally and at different locations in the valley. Most food collecting activity took place within small, extended family groups. Adapting to the limited distribution of natural resources in the region, each family group occupied different areas of the valley and conducted activities within home ranges that included both summer and winter locations. Shoshone families spent the late summer and fall months in the mountains, where subsistence activities included the gathering of pine nuts, roots, and grasses, occasionally supplemented with the hunting of large and small game (including participation in communal rabbit drives held each fall). Spring sites at lower elevations were occupied during the winter, spring, and early summer months. At these locales, families collected mesquite beans (which, along with the pine nuts, formed the principal dietary staple, screw beans, yucca, and cactus.²⁹ Strict systems of private property did not exist, but a family's use of particular areas was known and generally respected.³⁰

Because of the high overheads of mining in isolated districts, the profitability of mining ventures in Death Valley hinged not only on ore values, but also on the ability to secure cheap access to sources labor and water. Labor needs were met to some extent by the employment of local Shoshone. For many Shoshone families wage labor had become a matter of survival because the advent of mining in the region had devastated seasonal harvests (the widespread felling of pinyon pine for construction materials, firewood, and charcoal production, for instance, rapidly depleted pine-nut reserves). However, few Shoshone worked directly for metal mines on account of a general dislike for underground work. Rather, the Timbisha Shoshone tended to work "Indian jobs," characterized by hard labor and low pay and subject to the uncertain fortunes of enterprises in the valley. Women found limited work typically as domestic servants and laundresses, but also made baskets for sale. Men often hauled wood for mines, herded cattle and horses for local ranchers, or alternatively packed or rented burros. Around the turn of the century, employment opportunities also extended to the railroad and construction industries. The building of Albert Johnson's ranch (Scotty's Castle) in

²⁸ "Timbisha" derives from the Shoshone name for Furnace Creek. Western Shoshone groups, as defined largely upon linguistic grounds, occupy a broad area extending from southeastern California through central and eastern Nevada. Refer David H. Thomas, Lorann S. A. Pendleton, and Stephen C. Cappannari, "Western Shoshone," in *Handbook of North American Indians, Vol. 11, Great Basin* (Washington D.C.: Smithsonian Institution Press, 1986), 262-283; Steven Crum, *The Road on Which We Came: A History of the Western Shoshone* (Salt Lake City: University of Utah Press, 1994).

²⁹ Julian Steward, "Abasin-Plateau Aboriginal Sociopolitical Groups," *Bureau of American Ethnology Bulletin 120* (Washington D.C.: GPO, 1938), 72-74, 84-93; Beth Sennett, "Wage Labor: Survival for the Death Valley Timbisha," in Alice Littlefield and Martha Knack (eds.), *Native Americans and Wage Labor: Ethnohistorical Perspectives* (Norman, Oklahoma: University of Oklahoma Press, 1996), 219; E.W. Nelson, "The Panamint and Saline Valley (Col.) Indians," *American Anthropologist*, vol. 4 (1891), 371-372; Frederick V. Coville, "The Panamint Indians of California," *American Anthropologist*, vol. 5 (1892), 351-362; Crum, *The Road on Which We Came*, 1-14.

³⁰ Sennett, "Wage Labor," 224-225.

Grapevine Canyon was noteworthy especially for Death Valley residents, since Johnson employed more than 70 Indian laborers between 1925 and the abandonment of the project in 1931 due to bankruptcy.³¹

Water was essential for mining operations not only for meeting the domestic needs of an often sizable workforce, but also for applications such as power generation, equipment cooling, and ore concentration. Companies opting to mill ores on-site (a common means to reduce transportation costs) faced particularly acute water demands, given that most beneficiation techniques employed water baths or slurries to separate valuable minerals from waste rock – with some frequently-used techniques requiring water at the rate of several gallons per minute.³² In a region where water prices often fetched \$5 per barrel (approximately 16 cents per gallon), and up to three times as much during rush periods, the ability for companies to tap local water supplies exerted a critical influence over the character and longevity of mining operations.³³ Mining companies could lessen the demand for water by enforcing its scrupulous use. Two common solutions involved limiting the use of water underground (otherwise important for reducing the generation of dust and the incidence of silicosis) and recycling as much water as possible. In the early decades of the twentieth century, the Skidoo Gold Mines Company (1906-1917) engineered arguably the most dramatic solution to the perpetual water problem in Death Valley by constructing a 20-mile-long pipeline along the crest of the Panamint Mountains to Birch Spring (at a cost of \$250,000), and for the unusual purpose of enabling the company mill to be run by waterpower. Water shortages at most mines, however, were unavoidable. Even at Skidoo, summer heat and winter freeze-thaw cycles frequently ruptured the pipeline and forced the temporary suspension of operations.³⁴

A general absence of documentation about Native land rights in mining journals and correspondence suggests that miners expressed little hesitation in claiming ownership to spring sites. While informal arrangements with Native Americans in Death Valley may have occurred, few miners encountered problems in gaining legal title to spring sites unless other Euro-Americans had arrived there first. The non-reservation status of the Timbisha Shoshone meant that unless an Indian Allotment or rancheria (a term denoting a small reservation) was applied for; lands in the region were otherwise categorized as public domain and open to white ownership.³⁵ The Skidoo Mining company's early

³¹ Nelson, "The Panamint and Saline Valley Indians," 372; Sennett, "Wage Labor," 229-243; T.R. Goodwin (Superintendent, Death Valley National Monument) to Dane Coolidge, May 11, 1936, Death Valley National Park Archives, L30 Land Use Indian Village. Archival references hereafter adopt the following notations. Death Valley National Park Archives (DEVA), Catalog no. (C), Accession No. (A), Record Group (RG).

³² Depending on the scale of operation and concentration technique employed, water usage in mills varied from 1.25-40 tons of water per ton of ore. Robert H. Richards and Charles E. Locke, *Textbook of Ore Dressing* (New York: McGraw-Hill, 1940), 440.

³³ Richard Lingenfelter, *Death Valley and the Amargosa: A Land of Illusion* (Berkeley: University of California Press, 1986), 150, 222, 280, 321.

³⁴ Lingenfelter, *Death Valley and the Amargosa*, 275-309.

³⁵ Crum, *The Road on Which We Came*, 59-84.

purchase of Birch Spring from Prospector Fred Gray indicates that some miners in Death Valley realized the monetary value attached to owning water rights in the region and had pursued their ownership.³⁶

The ease at which miners claimed spring sites did not occur because the Timbisha Shoshone had abandoned former systems of land use. To the contrary, many Shoshone families during the historic period adopted practices that entailed the more intensive use of spring sites. Beginning as early as the 1870s, the Death Valley Shoshone established horticultural plots at winter camps using techniques borrowed both from Euro-Americans and the Southern Paiute (who lived in the southern reaches of the valley).³⁷ Horticultural practices spread rapidly through the region, and the types of crops grown tended to be similar from camp to camp. According to various observations around 1890, Panamint George, whose winter camp was located at the mouth of Hall Canyon on the west side of the Panamint Mountains, grew corn, beans, melons, and squashes and tended a small fruit orchard with peach and fig trees. Ten miles away, Hungry Bill's camp in Johnson Canyon (six miles north of Warm Springs) included peach trees and grapevines in addition to corn, melon, and squash plants. Similar combinations of crops and fruit trees were observed in Grapevine canyon (some 70 miles north of Hungry Bill's ranch) and at spring sites further west in the Saline Valley, but many other garden locations are known to have existed. At some winter camps, Shoshone families also planted cash crops (particularly alfalfa, barley, and wheat) for sale to miners.³⁸

Although the advent of mining in Death Valley rendered earlier subsistence patterns unfeasible, the economic adjustments of Shoshone people during the nineteenth and twentieth centuries continued to reflect a strong attachment to place. As with the majority of Western Shoshone, the Timbisha Shoshone rejected government requests to relocate to reservation lands at the Nevada-Idaho border.³⁹ In addition to favoring local wage work opportunities, the Timbisha Shoshone preferred seasonal jobs because this enabled them to maintain their involvement in communal dances held throughout the region and also to visit relatives on a regular basis. The gathering of mesquite beans, pine nuts, and the occasional hunting of bighorn sheep also persisted.⁴⁰ During the 1930s, the Death Valley Shoshone increasingly made inquiries to regional Indian agencies about their legal title to lands. Of particular concern to mining companies –

³⁶ Linda Greene and Robert Latschar, *Historic Resource Study: A History of Mining in Death Valley National Monument*, vol. 2 (Denver: National Park Service, 1981), 613.

³⁷ Steward, "Basin-Plateau," 89; Sennett, "Wage Labor," 231.

³⁸ Nelson, "The Panamint and Saline Valley Indians," 371-372; Coville, "The Panamint Indians of California," 352; Catherine Fowler, Molly Dufort, Mary K. Rusco, and Pauline Esteves, "In the Field in Death Valley: Julian Steward's Panamint Shoshone Fieldwork," in Richard O. Clemmer, L. Daniel Myers, and Mary Elizabeth Rudden (eds.) *Julian Steward and the Great Basin: The Making of an Anthropologist* (Salt Lake City: University of Utah Press, 1999), 56; Robert Yohe, "Archaeological Evidence of Aboriginal Cultigen Use in Late Nineteenth and Early Twentieth Century Death Valley, California," *Journal of Ethnobiology*, vol. 17, no. 2 (1997), 267-282.

³⁹ Refer Crum, *The Road on Which We Came*, 59-84.

⁴⁰ Sennett, "Wage Labor," 232; Goodwin to Coolidge, May 11, 1936; Crum, *The Road on Which We Came*, 59.

and, after 1934, the interest of the Death Valley National Monument – these inquiries tended to center upon spring sites. Only a few inquiries culminated in the award of Indian Allotment (a reflection of the evident competition with mining and government interests). Their occurrence, nevertheless, formed the base for a longer and continuing struggle for the recognition of an Indian land base in Death Valley – acknowledged recently by a landmark award to the Timbisha Shoshone in November, 2000, of several thousand acres within and around Death Valley National Park.⁴¹

In early 1930, the site of Warm Springs, a moderate, good quality water supply located in the southwestern portion of Death Valley, became the focus of a legal dispute between Louise Grantham, the lead partner of a small-scale mining outfit, and Robert Thompson, a Western Shoshone man. The dispute lasted 12 years, culminating in a court trial in which the Mining Law and Dawes Act were set at cross-purposes. The occurrence of the court case is not only an early signifier of the lengths to which the Timbisha Shoshone would pursue issues of land ownership, but it also indicates that mining enterprises in the valley could not simply ignore these claims. Documentary and physical evidence enables a detailed understanding of the course of the trial, revealing the difficulties that Thompson encountered in perfecting his title, and also that miners were not above using dishonest measure to secure their entitlement to strategic resources.

MINING, MILLING, AND LITIGATION AT WARM SPRINGS

By the 1930s, the Death Valley region had seen mineral rushes for gold, silver, copper, lead, borax, and nitrate deposits. With the exception of borax deposits identified at the floor of the valley, the difficulties of mining in an arid, isolated environment with comparatively small and low-grade ore bodies meant that most ventures were unprofitable and short lived. However, if Death Valley was not the most productive of California's mining districts, it nevertheless gave allusions to being one. Successive waves of prospecting since the mid-nineteenth century had not only generated considerable mystique about the region, but also pockmarked the hillsides with thousands of prospect sites, including shafts, adits, shallow pits, and open cuts, in addition to mill sites, company camps, and locales of several former boomtowns. Not all vestiges resulted from either successful or legitimate enterprise, but to prospectors adopting an attitude that mines – real or fraudulent – started from some ore showing, the remnants of historic mining activities provided abundant places in which to test one's luck.⁴²

⁴¹ The Timbisha Shoshone gained federal recognition in 1983 and, on November 1, 2000, the Timbisha Shoshone Homeland Act granted 7,500 acres to the Timbisha tribe, of which 300 acres were awarded at Furnace Creek in Death Valley National Park. Refer Steven Haberfield, "Government to Government Negotiations: How the Timbisha Shoshone Got its Land Back," *American Indian Culture and Research Journal*, vol. 24, no. 4, 127-165; Crum, *The Road on Which We Came*, 59.

⁴² For a comprehensive account of the trials and tribulations of mining in Death Valley, refer Ligenfelter, *Death Valley and the Amargosa*.

For Louise Grantham, a nurse by trade, and Dorothy Ketchum, a doctor's wife, the allure of gold prospecting probably had more to do with curiosity and independence than with a drive to make ends meet. Grantham and Ketchum actually began prospecting in the early 1920s, a time when many gold companies were floundering, and Grantham's move to Southern California had been largely predicated (by her own admission) on finding out why a miner her father had grubstaked for years "produced nothing but cancelled checks."⁴³ The two women learned the art of prospecting through the encouragement and assistance of Frank Brock, a mining engineer and mine promoter with considerable experience in the Californian desert.⁴⁴ For a brief time the trio made weekend prospecting excursions into the Ibex Hills south of Death Valley where occurrences of potassium nitrate (the principal ingredient in blasting powder) and placer gold had attracted mining interest since the early 1900s.⁴⁵ Similar to prospectors before them, however, their efforts failed to identify deposits sizable or rich enough to counter the region's continued remoteness. Furthermore, a personal falling out between Brock and Grantham around this time ultimately brought the group's dissolution.⁴⁶ Undeterred by these events, Grantham and Ketchum opted to continue prospecting together and shifted their base of operations westward into the Panamint Mountains flanking the western edge of Death Valley. By the late-1920s, they had teamed up with Nina Bradley, the daughter of a local prospector, and Ernest Huhn, a seasoned prospector who had focused mining efforts on four patented lode claims located on the flanks of Gold Hill.⁴⁷ In addition to promising gold values, the "Panamint Treasure" claims presented two significant advantages over other prospects in the region. The existence of a rough road through nearby Warm Springs Canyon improved both the delivery speed and volume of supplies that could be brought to the claims. The claims were also only four miles from a water supply, in which the water was not only of good quality and moderate volume (approximately 40-50 gallons per minute), but available year-round and accessible by road. At the outflow of the springs, and under the shade provided by fig and peach trees, the prospectors set up canvas tents to serve as a base camp.⁴⁸

⁴³ Norris leap, "Woman Mine Boss Triumphs in 25-Year War with Desert," *Los Angeles Times*, Sunday March 4, 1951, Part 2. DEVA, C30699, A01240, Central Files, Solander Box 8; For Grantham's arrival in the mid-1920s, refer to Testimony of Charles Brown, Senator, California State Legislature, March 7, 1941, Sacramento, CA, in United States vs. Grantham et al., p. 10. DEVA, C28138, A01632, Timbisha Genealogy Papers 1933-38.

⁴⁴ Brock was perhaps the most well off of the three, for he had recently earned \$350,000 from the sale of clay deposits he staked near Ash Meadows. Ligenfelter, *Death Valley and the Amargosa*, 409-410.

⁴⁵ See L.F. Noble, G.R. Mansfield, "Nitrate Deposits in the Amargosa Region, Southeastern California," *U.S. Geol. Survey Bulletin 724* (Washington, D.C.: GPO, 1922).

⁴⁶ The falling out was apparently precipitated by Grantham's rejection of Brock's sexual advances. Refer Sally Zanjani, *A Mine of Her Own: Women Prospectors in the American West, 1850-1950* (Lincoln, University of Nebraska Press, 1997), 212.

⁴⁷ The mining claims were leased from Fred Gray and William Hyder. Presumably Ernest Huhn leased the claims initially, but Louise Grantham was reported as the prime lessee in 1932. R.J. Sampson, "Mineral Resources of a Part of the Panamint Range," Report 28 of the State Mineralogists, no.3, 4 (Sacramento: California State Printing Office, 1933), 369.

⁴⁸ True to its name, water exits Warm Springs at a temperature of 94 degrees Fahrenheit. Continental Minerals Corporation, *Environmental Review and Analysis, Warm Springs Talc Mine, Plan of Operations*, 6 (DEVA Library).

Although Grantham found no other party camped at the springs, the presence of mature fruit trees in an area otherwise spotted with creosote and mesquite brush indicated that the springs had been the site of earlier occupation. Mineral prospectors may have first visited the springs as early as the 1860s during the silver rush to Panamint City (located on the western side of the Panamints), and a few mining outfits used the springs later in the century with greater regularity.⁴⁹ The preponderance of evidence however indicates that Western Shoshone groups used the area seasonally and planted the trees to supplement winter staples. Although initially unbeknownst to Grantham, the orchard at Warm Springs had, in fact, been established by Panamint Tom, a *pakwinawi* (chief) of the Panamint Shoshone, possibly as early as 1870.⁵⁰ The dozen-or-so trees were planted to follow the crooked line of a small, short creek issuing from the springs. Just south of the orchard and closer to the springs Panamint Tom's family erected two wickiups. While the winter camp existed both prior to and contemporary with mining operations, Panamint Tom's use of the springs became infrequent after the first decade of the twentieth century. Around this time, his son, Robert Thompson (estimated to be aged in this 30s in 1910), picked up work in the region as a seasonal laborer. In addition to working at the Furnace Creek Ranch in the heart of Death Valley, Thompson also reportedly owned mining claims in western Nevada.⁵¹

Hearing news of Grantham's prospecting activity at Gold Hill, Thompson ventured back to Warm Springs with the intention of leasing water rights. Although Thompson held no official document proclaiming his ownership of the springs, Thompson in all likelihood knew of the property recently awarded to his uncles Hungry Bill and Panamint George who lived in the vicinity. In 1927, the federal government awarded 160 acres in Johnson Canyon to Hungry Bill's family (applied for in 1908) and, in 1928, Panamint George received a 560-acre rancheria that included his camp in Hall Canyon.⁵² Furthermore, the leasing of water to miners by Native Americans was not unprecedented, for a borax-mining company operating in the Saline Valley during the late nineteenth century reportedly paid Indians "a small royalty for the use of water during the irrigating season."⁵³ In all these cases, Native ownership had been determined

⁴⁹ Around the turn of the century, workers packed water from Warm Springs over the hills for use at the Carbonate Mine. Deposition of R.J. Fairbanks, United States vs. Louise Grantham et. al. DEVA, Timbisha Genealogy Papers 1933-1938, C28138, A01632.

⁵⁰ "Chief" is a loose designation, for it was more a position of prestige than power. The functions of the *pakwinawi* (also *pokwinapi*) primarily involved organizing rabbit drives and a fall festival. Jon P. Dayley, *Tumpisa (Panamint) Shoshone Dictionary* (Berkeley: University of California Press, 1989); Steward, "Basin-Plateau," 74-76; Sennett, "Wage Labor," 220-221. Panamint Tom's exact tribal affiliation is undetermined. Julian Steward considered that he may have been Kawaiisu rather than Shoshone [Steward, "Basin-Plateau," 85], but Steward seems to have regarded Panamint Tom's brothers, Panamint George and Hungry Bill, as Death Valley Shoshone.

⁵¹ Louise Grantham to Roy Nash, Department of Indian Affairs, April 20, 1936. DEVA, L30 Land Use Indian Village.

⁵² Hungry Bill's claim was the first legally recognized Indian Allotment in the area later circumscribed by the National Monument. Crum, *The Road on Which We Came*, 75, 122-123.

⁵³ Nelson, "The Panamint and Saline Valley Indians," 372.

by use-rights, and it is likely that this also formed the basis for Thompson's conviction as to his ownership over Warm Springs.

Grantham and Associates initially accepted Thompson's claim at face value, for in December 1929, the company entered into five-year lease of Warm Springs from Thompson for \$10 per month. Grantham's subsequent investigation of land deeds, however, indicated not only that Thompson held no legal patent to the springs but also that there was no legal record that any Native Americans had used the area. Armed with these findings, Grantham defaulted on payments after only six months and demanded Thompson produce papers indicating his rightful ownership to the land.⁵⁴

Any uncertainty cast over land ownership did not hinder the pace of prospecting. Beginning in the early 1930s, Grantham and Associates staked several talc deposits visible over a two-mile stretch on the south side of Warm Springs Canyon east of the springs. Mining activity also continued on the quartz veins at Panamint Treasure, where development work included two drifts. Gold values petered out quickly in the lower of the two tunnels, and the company remodeled the workings at some point into accommodations for mine workers.⁵⁵ Work on the upper tunnel proved more promising, to the extent that in 1932, the annual report of the state Mineralogist noted Grantham's intention to build a gold mill at the springs for processing the ore.⁵⁶ A preparatory step was taken in the following year, when on 5 February 1933, Ketchum and Bradley located a five acre mill site by the springs. The mill claim spanned the floor of the narrow valley, with the southern portion of the claim incorporating the base camp at the outflow of the springs, the spring's short watercourse, and most of the fruit trees.

The formation of the Death Valley National Monument six days later entailed land acquisition at a much larger scale. At its creation, the Monument incorporated 1.6 million acres of land in and extending from the floor of Death Valley to the ridges of the Cottonwood, Funeral, Grapevine, Greenwater, and Panamint Ranges to preserve the area's "unusual features of scenic, scientific, and educational interest." Within this area, the founding proclamation warned "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."⁵⁷ Despite this proclamation, the mill site's earlier staking likely afforded Grantham's operations a measure of security. It is also apparent that any tension that the Monument's formation may have created between the National Park Service and

⁵⁴ Ray Parrett (Superintendent Walker River Agency), to Col. John White (Superintendent Sequoia and Death Valley National Parks), July 1, 1934. DEVA, L-30 Landuse, Indian Village; Ray Parrett to Commissioner of Indian Affairs, July 13, 1934. DEVA, L-30 Landuse, Indian Village, 1933-59; Grantham to Nash, April 20, 1936; Alida C. Bowler (Carson Indian Agency) to Commissioner of Indian Affairs, January 23, 1939. DEVA. C44409, A01240, RG 1, p. 94.

⁵⁵ When visited by an archaeological survey in the 1970s, the workings included two metal bunk beds, a table and two chairs, and shelving. Linda Greene, *Historic Resource Study*, 116, 120.

⁵⁶ Sampson, "Mineral Resources of a Part of the Panamint Range," 369.

⁵⁷ Herbert Hoover, *Proclamation No. 2028 Death Valley National Monument*, February 11, 1933, in *U.S. Statutes at Large*, 47, pt. 2, 2554.

the mining industry was quickly diffused. In June of that year, the Department of the Interior extended mining laws to the Monument (joining Mt. McKinley [Denali] National Park in Alaska as the only two parks in the depression era open to mineral prospecting after their formation).⁵⁸ In addition to the right to prospect, locate, and patent claims, mining interests in the valley benefited also from a series of infrastructure developments intended to open the area to tourism. This included the purchase of a private road situated on the floor of Death Valley (and the consequent abolition of tolls) and a variety of improvements by the Civilian Conservation Corps.⁵⁹

Early Monument policies were less accommodating to Native American interests. The founding proclamation for the Death Valley National Monument gave no recognition to the contemporary and ancestral use of the region by Western Shoshone and Southern Paiute groups. Native Americans were visible enough, however, to engage discussions among Monument officials on the “Indian problem.” In particular, the Native use of the Death Valley area for grazing domestic animals did not fit with the Monument’s edict to preserve (and exhibit) a natural environment.⁶⁰ Although the National Park Service did not seek to restrict the seasonal collection of pine nuts and mesquite beans in the Panamints, other Shoshone practices, such as hunting sheep, were viewed as “taking toll of the sparse wild life of the desert region: and eventually barred through the application of game laws.”⁶¹ More insidious, however, was a belief that Death Valley’s arid environment permitted only an impoverished existence. Evidence of hardships certainly abounded in the 1930s, enough to spur food relief efforts by the National Park Service and Carson Indian Agency to assist the Death Valley Shoshone.⁶² Contemporary conditions, however, seem only to have partly informed Superintendent John White’s contention that wage labor at Furnace Creek provided Shoshones with “an opportunity to work and live under better conditions than they could have ever experienced under their own system of life.”⁶³

⁵⁸ M.W. Von Bernewitz, *Handbook for Prospectors and Operators of Small Mines*, 4th ed. (New York, McGraw-Hill, 1943), 34; Anon. “Death Valley National Monument is Now Open to Mining.” *Report 30 of the State Mineralogist*, vol. 30, no. 4 (Sacramento, 1934), 444-445.

⁵⁹ Ligenfelter, *Death Valley and the Amargosa*, 467.

⁶⁰ Monument policies were in accord with policies toward Native Americans in most National Parks. For comparison with developments in Yellowstone, Yosemite, and Glacier National Parks, refer Mark D. Spence, *Dispossessing the Wilderness: Indian Removal and the Making of National Parks* (New York: Oxford University Press, 2000).

⁶¹ John White to Director, National Park Service, July 19, 1934. DEVA, L30 Landuse Indian Village.

⁶² The full extent of relief work is not known, but T.R. Goodwin (an advisor to White, promoted to Superintendent in 1937) stated that in 1935 he frequently secured food for the Death Valley Shoshone from the Wildrose CCC camp and by subscription from Trona residents, and that Alida Bowler from the Carson Indian Agency had also sent in a “large consignment of groceries and clothing, [and] WPS surplus.” Goodwin to Coolidge, May 11, 1936.

⁶³ White juxtaposed the impoverishment of Shoshone livelihood with “the Indians who lived on the green plains [sic] or in the mountains and forest areas of America which teemed iwht game and edible fuits and vegetables. White to Director, National Park Service, July 19, 1934; John White to Ray Parrett, July 19, 1934. DEVA, L30 Landuse Indian Village.

The Monument Superintendent first met news of Robert Thompson's application for a patent to Warm Springs with trepidation. In part, Thompson's application was disconcerting because it added to two other Shoshone claims to springs in the Monument. Tom Wilson, Thompson's brother-in-law, claimed several springs along Emigrant Wash on the west side of Panamint Range for stock raising, and Johnny Hunter claimed springs in the Cottonwood Mountains (just north of the Panamints) where his family lived during the winter months.⁶⁴ White expressed no doubt "that every water hole in Death Valley has at sometime been used by the Shoshone and other Indians" but stressed in communications to the Director of the National Park Service that public access to water resources was vital to the development of the Monument.⁶⁵

Correspondence between the Monument Superintendent and the Carson Indian Agency (whose jurisdiction extended to the Death Valley Shoshone) also addressed the Warm Springs dispute, including concerns over Thompson's capitalistic motives. Unlike Wilson and Hunter, Thompson had apparently not camped at the springs for several years, nor expressed any intention to do so in the future. Instead, Thompson had been fairly candid as to the financial benefits of claiming the springs, remarking when asked why he pursued their ownership, "What the hell you think? I want money. I sell him!"⁶⁶ It was also rumored that Thompson was "a pretty hard drinker" and planned to use the rental money to support his habit.⁶⁷ As with Grantham's earlier inquiries, an investigation of land deed records by Monument officials found no official record in support of Thompson's legal claim and the Director of the National Park Service referred the matter to the Service's Director of Investigations.⁶⁸

Although the question over Warm Spring's ownership showed signs of becoming protracted, none of the agencies involved requested that Grantham and Associates suspend work until the matter was resolved. This was especially fortuitous for Grantham's company, since the economic climate for gold mining was undergoing rapid, favorable shifts. In April 1933, the US Congress abandoned the Gold Standard in an effort to revive the national economy. Over the next few months, the value of gold rose steadily from the moderated selling price of \$26 per fine ounce. Gold mining incentives improved further with the passage of the Gold Reserve Act in November 1934. In addition to fixing gold prices at a high of \$35 per fine ounce, the Act also guaranteed the purchase of all gold by the US Treasury.⁶⁹ These changes permitted higher profits at

⁶⁴ T.R. Goodwin to John White, July 17, 1934. DEVA, L30 Landuse Indian Village.

⁶⁵ White to Director, National Park Service, July 19, 1934; see also Goodwin to White, July 17, 1934.

⁶⁶ T.R. Goodwin (Senior Project Superintendent in Charge), to Dane Coolidge, May 11, 1936. DEVA, L30 Landuse Indian Village; Alida Bowler to John Collier (Commissioner of Indian Affairs), April 30, 1936. DEVA, L30 Landuse Indian Village.

⁶⁷ Bowler to Collie, April 30, 1936.

⁶⁸ A.E. Demaray (Acting Director National Park Service) to Commissioner of Indian Affairs, August 6, 1934, DEVA, L30 Landuse Indian Village.

⁶⁹ Chas. W. Henderson, "Gold and Silver," in *Minerals Yearbook 1934*, Part II: Metals (Washington, D.C.: GPO, 1934), 25-34; J.P. Dunlop, "Gold and Silver," in *Minerals Yearbook 1935* (Washington, D.C.: GPO, 1936), 239.

working mines, and greatly improved the feasibility of small operations throughout the 1930s.

In May 1934, in the midst of these improving conditions, Grantham and Associates staked the Old Mill Stream Quartz Mining Claim following the discovery of two mineral outcrops just south of the mill site: a vein of lead and silver “not far west of the spring,” and a quartz outcrop carrying “rather good gold values” on the hillside east of the springs.⁷⁰ While the staking of the mine claim might be explained as a response to improved national conditions, the specific location of the claim suggests that Grantham and Associates knew of Thompson’s continuing inquiries into ownership and sought counter measures (a preemptive strategy possibly seen earlier in the staking of the mill site days before the creation of the Death Valley National Monument).⁷¹ According to Grantham, the quartz outcrop trended westward, directly beneath the springs. The claim, 600 feet wide and 1,500 feet long, abutted the southern edge of the mill claim, in such a way that the mineral outcroppings were located at its extreme ends and that Warm Springs resided near its dead center. The location notice also claimed “all water and timber and any other rights appurtenant, allowed by the law of this State or of the United States,” a more explicit statement than made in the notice for the mill-site staked the previous year.⁷²

Thompson filed officially for a fee patent to forty acres at Warm Springs in November 1934. Although the passage of the Indian Reorganization Act in June 1934 had essentially ended the government’s allotment policy, Thompson’s application remained valid because this moratorium applied only to reservation lands.⁷³ In June 1935, the General Land Office (GLO) sent Special Agent Cassius Smith to Death Valley to investigate the validity of Thompson’s claim. After interviewing Thompson and others, Smith concluded that Thompson and his ancestors had a long history of occupation at the springs that spanned more than seventy-five years. Intriguingly, Smith was also “unable to find anything showing of mineral within the boundaries of the [Grantham] claims that would justify the expenditure of time and money in the hope of developing a paying mine.”⁷⁴ Although unstated at the time, these observations support

⁷⁰ Grantham to Nash, April 20, 1936.

⁷¹ It is known from the later court trial that Thompson had sent a letter to Grantham dated April 3, 1934. The contents are unknown, but its use as an exhibit suggests it may have indicated his intention to file for an allotment. United States vs. Grantham et. Al. C28138, A01632, Timbisha Genealogy Papers 1933-38.

⁷² Department of the Interior, Bureau of Indian Affairs, *Indian Allotment Survey No. 330, Death Valley Monument and National Park*, Mary 16, 1954. C44377, A01240, DEVA Central Files, 1931-1978, Solander Box 12. The earlier claim exhibits tongue-in-cheek legalese. “together with all and singular the hereditaments and appurtenances thereunto belonging or in anywise appertaining.”

⁷³ *Wheeler-Howard Act* [Indian Reorganization Act], June 18, 1934, 48 Stat. 984, United States Code XXV, Secs. 461-479.

⁷⁴ J.M. Steward (Director of Lands) to Louise Grantham, May 5, 1936. DEVA, L30 Landuse Indian Village; Crum, “A Tripartite State of Affairs: The Timbisha Shoshone Tribe, the National Park Service, and the Bureau of Indian Affairs,” *American Indian Culture and Research Journal*, vol. 22, no. 1 (1998), 117-136; C.C. Smith to General Land Office, June 12, 1935, p. 9, Central Classified Files 35483-34-Carson-313, Record Group 75, National Archives.

an inference that the gold mining claims staked at Warm Springs were perhaps not all that they seemed.

Based on the Agent's findings, the Assistant Secretary of the Department of the Interior approved Thompson's application in August 1935, and authorized the GLO Commissioner to award a trust patent, in which fee patent status would be granted after 25 years. The Carson Indian Agency and Death Valley National Monument were in consensus with the Secretary's decision, largely on the grounds that a patent of this type would prevent Thompson from realizing the quick sale he desired.⁷⁵ In January 1936, surveyors from the GLO arrived at Warm Springs to record Indian Allotment 330.⁷⁶ Similar to Grantham's mill claim, the survey party set the Allotment across the floor of the canyon, but with Warm Springs situated about 200 feet inside its southern border. As such, the Indian Allotment overlaid Grantham and Associate's five-acre mill claim entirely and approximately three-quarters of the twenty-acre mining claim, just missing the quartz prospect on the hillside east of the springs.⁷⁷

In the eight-month period between the visits of the special agent and the survey crew, Grantham and Associates made several improvements to their mining properties, sufficient to change the mining prospects into a working gold mine. A board shed and shanty structure improved camp facilities somewhat, and a powder house for storing dynamite was constructed on the mine claim about 150 feet from the wall tents. More substantial improvements followed the arrival of mining machinery in the fall of 1935.⁷⁸ At the Panamint Treasure Mine, the company installed an aerial tramway to convey ore from the dump outside the adit to the valley floor. Back at the springs, Grantham and Associates erected a small diesel-powered milling facility at the northwest corner of the mill claim. When in operation, the company used a dump truck to relay ore from the lower tram terminus to the mill.

The excellent preservation of the Gold Hill Mill permits more detailed insights into the character of Grantham's operations at Warm Springs. Generally considered, the inventory of milling equipment and the types of technological processes employed indicate that the facility was much in keeping with contemporary trends for small-scale gold mills.⁷⁹ Ore received from the mine reached "milling size" (the size by which valuable mineral could be most profitably extracted) in two stages. A jaw crusher – so named for the repeated movement of a moving plate or "jaw" against a fixed plate, and between which ore was introduced – broke ore into one-inch diameter pieces. The

⁷⁵ Alida Bowler to United States General Land Office, April 14, 1936. DEVA, L30 Landuse Indian Village; Bowler to Collier, April 30, 1936.

⁷⁶ Stewart to Grantham, May 5, 1936.

⁷⁷ Robert Wilson, *Field Notes of Indian Allotment Survey No. 330 and Establishment of U.S. Location Monument No. 195* (March 1936).

⁷⁸ Louise Grantham, telegram to W.M. [sic] Goodwin, August 15, 1935. DEVA C44409, A01240, RG 1, p. 127.

⁷⁹ For general trends and examples of typical flow sheet refer Von Bernewitz, *Handbook for Prospectors and Operators of Small Mines*; E.D. Gardner and C.H. Johnson, "Mining and Milling Practices at Small Gold Mines," *U.S. Bureau of Mines Information Circular 6800* (Washington, D.C.: GPO, 1934).

second crushing stage was performed in a ball mill, a large cylinder half-filled with cast-iron balls. As the cylinder revolved, the tumbling action of the balls pulverized the ore until it was fine enough (typically sand-sized or smaller) to pass through the output screen. In accordance with conventional practices, the ball mill at Gold Hill operated in tandem with a classifier, which improved the consistency of the milled product by redirecting oversized product (namely material that sank when immersed in a water bath) back to the ball mill for further reduction.

Also in common with most small-scale facilities, the recovery portion of the circuit was designed for the capture of free-gold (gold uncombined with other substances) rather than the extraction of gold bound in more complex ores. The gravity concentration method adopted worked by separating mineral grains according to their relative weight, which, provided the ore was of a uniform size and ground fine enough, approximated the specific gravity of minerals. The mill's recovery circuit used three concentration tables. Each table operated by shaking a steady stream of ore over a tabletop fitted with riffles (wooden slats). Heavier particles, including gold, caught against the riffles and were jostled by the table action to one end of the table. Light minerals, such as quartz, flowed over the riffles and off another section of the table. Two tables were adapted to the recovery of the sand-sized particles, while the third worked slimes (silt-sized and finer). The tables were probably arranged in series, so that the waste from one table became the feed for the next, and with the sands treated before the slimes.⁸⁰ A shallow ditch from the main camp brought the water necessary for operating these machines and the classifier.⁸¹

The construction of the mill likely set Grantham and Associates back several thousand dollars, and the company evidently instituted some cost-cutting measures. Parsimony was expressed in mill design, for instance, by the absence of walls and a covering roof. Further savings were apparently afforded by the purchase of discounted equipment. The early age of patent dates embossed on one of the concentration tables, for example, suggests it was probably a secondhand piece.⁸² The absence of any markings for nameplates (or any other company markings) on the ball mill and classifier, along with the predominance of weld seams and irregular welded sections (seen on the classifier), suggests these two items were assembled at a less well-known machine shop and possible from scrap materials. Economizing measures extended to the Panamint Treasure Mine as well, where a mine car fashioned from a half steel drum welded atop a support frame was employed to convey ore along wooden tracks.⁸³

⁸⁰ The precise flow between gravity concentration machines is difficult to reconstruct from present evidence. At one point, the ore was pumped into a callow cone – a simple form of classifier – fixed above the slime table. The cone could have two uses: as a thickener, in which only material settling to the bottom of the cone was tapped for use on the tables; or a separator, in which materials at the bottom (sands) and that spilling over top (slimes) were directed to different tables.

⁸¹ Memo, Superintendent, Death Valley National Monument to Regional Director, Region Four, January 7, 1955, DEVA, C44375, A01240, Central Files 1931-78, RG 1, p. 87.

⁸² The eccentric mechanism on the Plat-O-Table is embossed with patents for 1908, 1914, and 1922, and “Other Pats Pending.”

⁸³ Greene, *Historic Resource Study*, 116.

Despite general equipment selections being consistent with the decisions of small operators, the arrangement of milling machinery at Gold Hill indicates significant differences from generally accepted practices. In a newly built facility, a mill's physical layout typically approaches the schematic, linear order of the flow sheet, with the ore generally flowing in one direction.⁸⁴ At Gold Hill, ore traveled almost a complete circle: east from the primary crusher to the secondary ore bin, north and west through finer crushing and classification, and west and south through the recovery circuit. The compact placement of machinery (at odds with a leading advantage of flat mill-sites) made this arrangement particularly problematic. Each machine could be accessed from the outside, but access within the circuit was restricted. This generated less-than-ideal conditions for machine repair and additions, and also created a few awkward workspaces. Manual shoveling, for instance, was likely needed on occasion to move ore from beneath the jaw crusher onto the conveyor. However, the limited available space meant the task would have been executed hunched over and with little freedom of movement. The compactness of space is also illustrated by one of the conveyor support posts having been scalloped out to accommodate the jaw crusher's drive wheel.⁸⁵ Other operative problems, such as uneven wear on belts or occasional belt slippage, may have resulted from slight differences in the alignments of equipment.⁸⁶ These complexities were avoidable, and their presence is highly suggestive that a professional millwright did not supervise the mill's construction.

The improvements to gold mining operations, even if awkward and jerrybuilt, provided Grantham and Associates with a means to raise quick capital for development work. Such work probably continued at the Panamint Treasure claims, although little if any effort was devoted to exploring the gold and lead-silver prospects located immediately east and west of the springs. Oddly enough, the company probably knew by this time that its best prospects lay in the workings of talc deposits. In addition to the talc claims staked east of the springs, Ernest Huhn had ventured outside of Warm Springs to stake talc outcroppings near Saratoga Springs in the Ibex Hills, where Grantham and Ketchum had once prospected.⁸⁷ If for nothing else, the mill and other improvements at Warm Springs provided a tangible indicator of the company's investment in the area. Grantham reinforced this connotation in future protestations.

In a written complaint to the Department of Indian Affairs shortly after the GLO survey, Grantham pointed out that her company had spent "many thousands of dollars," built "the only road of fourteen miles in the Warm Spring Canyon," and installed "a complete fifty ton mill and recovery plant which we are operating in conjunction with our

⁸⁴ For a discussion of the factors involved in the design of milling plants refer Arthur Taggart, *Handbook of Ore Dressing* (New York: John Wiley & Sons, 1927, 1288-1302).

⁸⁵ The frame for the ore conveyor collapsed sometime during the 1980s, but a few structural timbers (including the scalloped timber) remain onsite.

⁸⁶ The diesel engine, secondary ore bin, ball mill, and classifier are oriented at 17 degrees northeast, three degrees off from the rest of the equipment.

⁸⁷ Michel Digonnet, *Hiking in Death Valley: A Guide to its Natural Wonders and Mining Past* (privately published, 1997), 273.

mines.”⁸⁸ In the absence of further qualifiers, both of these latter claims exaggerated the sense of permanence and scale. A road through Warm Springs Canyon had been cut through by prospector Fred Gray around the turn of the century, and the route was listed as a county road until the formation of the Death Valley National Monument.⁸⁹ It is unknown when Grantham’s road improvements occurred, but the canyon road was in poor enough condition during the mid-1930s to delay the arrival of mining machinery to the site, possibly until the Civilian Conservation Corps arrived at her request.⁹⁰

While a technical assessment of milling equipment at the Gold Hill Mill verifies Grantham’s assertion that the facility was capable of processing fifty-tons per day (refer appendix), other physical evidence indicates that the milling system was unlikely to have run at even half its capacity. The primary ore bin held only five tons – a volume that would have cleared within two to two-and-one-half hours of the mill running – and the secondary ore bin fared little better at seven tons capacity.⁹¹ To run the mill at close to its actual capacity, therefore, would have necessitated either the continuous relay of ore between the mine and the mill or a major reconfiguration of the circuit (on account of the difficulty at which a larger bin could be added to the mill’s overly compact design).

It is also significant that company developments at Warm Springs were juxtaposed with the lack of an Indian presence in the region. Grantham’s letter to the Department of Indian Affairs asserted the land around Warm Springs was not agricultural, that no Native Americans had made their home at the springs for at least fifty years, and that the only Indians present in the area were those “working in the district for us [Grantham and Associates] or other white mine operators, but for this purpose only.” The fig and peach trees around the springs were attributed to the work of “an Englishmen [who] came to Death Valley for his health.” Grantham went so far as to argue that neither Thompson nor his father had ever lived at the springs. Thompson, she contested, lived on a ranch several miles to the north, while Panamint Tom had been based in Anvil Canyon (the next canyon south).⁹²

The public attention generated by the escalation of the company’s protests (and likely enhanced by the fact that Grantham and Associates was a woman-owned operation) convinced government officials that the Warm Springs dispute was “being used only for promotion purposes” (including the Monument Superintendent who had originally sided with Grantham’s cause).⁹³ In December 1936, the GLO issued the trust patent to Indian Allotment 330. In May of the following year, the Carson Indian Agency

⁸⁸ Grantham to Nash, April 20, 1936.

⁸⁹ T.R. Goodwin to Regional Director, Region Four, July 23, 1951. DEVA, L30 Landuse Indian Village.

⁹⁰ Grantham, telegram to Goodwin, August 15, 1935; T.R. Goodwin, telegram to Louise Grantham (n.d.). DEVA, C44409, A01240, Central Files, RG 1, p. 127, 128.

⁹¹ Based on Field measurements, with the weight of quartz approximating 90 pounds per cubic foot (refer Taggart, *Handbook of Ore Dressing*, 1037). Bin volumes at Gold Hill differed from conventional formulas recommending a primary bin hold twice the daily capacity to ensure the mill could run somewhat independently from the fluctuations of mine output.

⁹² Grantham to Nash, April 20, 1936.

⁹³ John White to T.R. Goodwin, May 21, 1936.

requested Grantham and Associates pay for current water usage and back rent or leave the property. Grantham chose instead to contest the validity of the allotment of the grounds that Thompson's official filing postdated her mining claims. Nina Bradley subsequently filed appeals to the GLO and to the Department of the Interior claiming that the company's claims held superior title. Disregarding Grantham's request to suspend any action until Bradley's appeal was adjudicated, the Carson Indian Agency advertised the allotment for five-year lease in October. That December, the property lease was awarded to two prospectors, Harry Gower and Owen Montgomery, who were testing claims in the Gold Hill vicinity.⁹⁴ The terms of the lease entitled them to build a campsite and mill at Warm Springs, and to use the spring water for both purposes. Grantham responded to the award by serving the lessees a trespass notice upon their arrival at the springs.⁹⁵

Little is known of the nature of Grantham's activities at Warm Springs during this time, except that the company was not idle. From 1935, the company filed proof of annual labor forms.⁹⁶ The milling circuit also received some minor modifications, suggesting some work continued on the gold claims. A foundation block located between the engine and jaw crusher and inscribed "1939" probably relates to the installation or modification of the ore conveyor mechanism.⁹⁷ A wire-net bed frame placed at the top of the secondary ore bin possibly about this time may have helped even the dispersal of ore throughout the bin.

In August 1939, the Department of the Interior rejected Bradley's appeal. This decision was based on several grounds, the two foremost being the facts gathered by Special Agent Cassius Smith in 1936, and that Grantham's action of signing the 1929 lease recognized Thompson's prior occupancy by default.⁹⁸ Following the decision, Grantham did not apparently obstruct Montgomery and Gower from using the springs, but she also expressed no intention of leaving.⁹⁹ The Carson Indian Agency served eviction notices to Bradley and Grantham respectively on November 16 and December 5, 1939.¹⁰⁰ Perhaps as a means to compensate Gower and Montgomery (who had made lease payments even when Grantham had denied them access), T.R. Goodwin, the new

⁹⁴ R.C. Boczkiewicz, *Invitation for Bids*, October 28, 1937. DEVA, C44409, A01240, Central Files, RG 1, p. 110.

⁹⁵ Louise Grantham to H.P. Gower, November 21, 1938. DEVA, C44409, A01240, Central Files, RG 1, p. 93.

⁹⁶ Included as plaintiff exhibits, U.S. vs. Louise Grantham et al.

⁹⁷ The initials DAK and RBK impressed alongside the date suggest the addition was installed, if not financed by the Ketchums.

⁹⁸ Harry Slattery, *United States Department of the Interior: Nina Bradley vs. Robert Thompson, Motion for Rehearing*, C44409, A01240, RG 1.

⁹⁹ T.R. Goodwin to Don C. Foster (Superintendent Carson Indian Agency), August 2, 1940. DEVA, C44409, A01240, Central Files, RG 1, p. 52.

¹⁰⁰ Don Foster to Commissioner of Indian Affairs, January 9, 1940. DEVA C44409, A01240, Central Files, RG 1, p. 61.

Monument superintendent, suggested preventing Grantham from removing the mill.¹⁰¹ Any such plan would not be actualized promptly. After the thirty-day grace period expired without any response from Grantham, the Department of Indian Affairs initiated court proceedings against the company.

The non-jury trial commenced in April 1941 as case No. 56 Civil, United States vs. Louise Grantham, Nina Bradley, Dorothy Ketchum, and Joseph Barter.¹⁰² In the months leading up to the trial, attorneys took upwards of thirty depositions from long-time area residents, including Panamint George, Al Meyers (a wealthy capitalist dubbed “the Father of Goldfield”) and prospectors Pete Auereberry, and Harold and Henry Ashford. Twelve witnesses were also scheduled to appear in Court.

Given that the trial began as a case to evict Grantham, it is surprising that the court judgment passed a year later would order Thompson to be “forever restrained, enjoined and debarred from asserting any claim or claims whatsoever” over the Old Mill Stream Quartz and the Gold Hill Mill Site claims.¹⁰³ The reversal of the court decision reflects, in part, the inability of legislative practice to contend with issues of Shoshone land use and different value systems. While Thompson was probably not at Warm Springs at the time of Grantham’s arrival, witness testimony confirmed that the Shoshone had long used the area for a seasonal camp, that Thompson had been born at the springs, and that Panamint Tom had planted the fruit trees at the springs sometime before the turn of the century. Panamint George’s deposition disclosed the spring’s Shoshone name, and he and a number of other witnesses recalled seeing Panamint Tom and Robert Thompson and their wives camped at the springs on occasion, including as late as the 1920s. Senator Charles Brown also recollected one of the wickiups being a “kind of rock wall affair” of which there were still apparently indications of its location.¹⁰⁴ Thompson had also been seen regularly throughout the area. Senator Brown recalled that Thompson used to visit his father in law at Greenwater, that he often came to the town of Shoshone to buy supplies, and that he had also met Thompson from time to time in Furnace Creek Canyon. Around the time of the court trial, Thompson had moved residence to Lone Pine in Owens Valley (northwest of Death Valley).¹⁰⁵ Although Thompson evidently traveled widely throughout the Death Valley region, the sites mentioned in witness testimony indicates that he spent most of his time in the central and southern portions of Death Valley, within approximately 40 miles of Warm Springs. Defense attorneys, however,

¹⁰¹ Harry Gower and Owen Montgomery to T.R. Goodwin, July 15, 1939. DEVA C44409, A01240, Central Files, RG 1, p. 90; Alida Bowler to Mr. Andrews (Chief Clerk, Commissioner of Indian Affairs), December 6, 1938. DEVA, L30 Landuse Indian Village.

¹⁰² U.S. vs. Grantham et al.

¹⁰³ Judgment, U.S. vs. Louise Grantham et al., February 20, 1942. The judgment notice had typed but crossed out the following wrote sentence: “It is further ordered, adjudged and decreed that defendants have and recover from plaintiff their costs of suit, herein taxed at \$_____.” U.S. vs. Grantham et al.; W.E. Walk, Jr. (Davidson, Bartlett and Walk Attorneys at Law) to Thomas Kuchel (U.S. Senator), July 20, 1954. DEVA, C44375, A01240, Central Files, RG 1; Also refer Crum, “A Tripartite State of Affairs,” 122.

¹⁰⁴ Deposition of Senator Charles Brown, Mary 7, 1941, 9. U.S. vs. Grantham et al.

¹⁰⁵ Deposition of Senator Charles Brown, Mary 7, 1941, 9. U.S. vs. Grantham et al.; Robert Thompson to T.R. Goodwin, February 18, 1940, DEVA C44409, A01240, Central Files, RG 1.\

seem to have elicited information about Thompson's various whereabouts to support an argument for his itinerancy, and in which Thompson's expressed interest in leasing or selling the property appeared blatantly opportunistic. Such reasoning failed to take into account that other Death Valley Shoshone had also expressed an interest in owning the spring sites they habitually used.¹⁰⁶

In favor of Grantham, both the mine and the mill site were located as required by the law, and the mill site was used for milling purposes. Even if Allotment 330 supposedly held superior title, both the mine and mill claims had preceded the date of Thompson's official application for an Allotment. These circumstances helped anchor Grantham's argument that Thompson became interested in establishing his ownership of the claims only after he knew of the company's use of the springs.

Grantham and Associates also benefited from the lenient definition of a "valid mineral location." The General Mining Act, in fact, offered no criterion, but by the early 1900s, court rulings favored the definition of a valuable mineral deposit as one that "would justify a man of ordinary prudence, not necessarily a skilled miner, in the expenditure of his time and money in the development of the property."¹⁰⁷ Mining law did stipulate the necessity of completing \$100 annual assessment work to keep ownership of a claim. However, the federal government had suspended this requirement each year from 1932 to help revitalize the national economy (a practice that continued until after World War II).¹⁰⁸ Consequently, Grantham's title to the Old Mill Stream Quartz claim remained legitimate, in spite of the lack of development work beyond a couple of prospect holes, and contrary to a gold specimen she submitted for analysis during the trial that was found to carry a meager 0.065 ounces of gold and 0.90 ounces of silver per ton (about ten times poorer than the quality needed to justify extraction at such a remote location).¹⁰⁹

The court ruling ended the 12-year long dispute between Thompson and Grantham over the rights to Warm Springs. Although Thompson still kept possession of the Indian Allotment, the 20 acres of land existing outside of the mining claims comprised "nothing but a sand and rock area," of little merit for seasonal use and

¹⁰⁶ Refer Goodwin to White, July 17, 1934.

¹⁰⁷ This statement, issued as a 1905 Supreme Court ruling (*Chrisman v. Miller*, 197 U.S. 313) affirmed an earlier decision made by the Department of the Interior in *Castle v. Womble* (19 LD 455 (1984)), in which a valuable deposit was defined as being where "the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success in developing a valuable min." The subtle variance of definitions can be gleaned from J.W. Thompson, "United States Mining Statues Annotated," *U.S. Bureau of Mine Bulletin 94* (Washington, D.C.: GPO, 1915).

¹⁰⁸ Miller, *The Automobile Gold Rushes*, 77.

¹⁰⁹ Ore samples were presumably taken from the Old Mill Stream Quartz Mining Claim rather than the Panamint Treasure location, since it was the former claim that conflicted with Thompson's Allotment. Twining Laboratories to Joseph Anderson, April 25, 1941, in *U.S. vs. Grantham et al.; Slattery, Nina Bradley vs. Robert Thompson*.

essentially valueless for leasing to other miners.¹¹⁰ In essence, the court decision importantly recognized the existence of an Indian land base in the Monument, but it did little to ensure its vitality.

Thompson did not live long past the court trial to see any tangible remuneration. After his death sometime in the 1940s, ownership of the allotment transferred to his wife and children. Within a decade of the trial's conclusion, however, Indian Allotment 330 had been conveyed out of the family's ownership. Beginning in the postwar era, the Bureau of Indian Affairs overturned the principles of cultural pluralism that had underscored the Indian Reorganization Act and endorsed a policy of termination. With many parallels to the Burke Act before it, the new Indian policy endeavored to end the federal government's trust responsibility over Indian tribes in large part through expediting the sale of Indian lands. In 1951, the Sacramento Area Office of the Bureau of Indian Affairs slated Thompson's allotment for auction along with more than 200 other Indian land holdings in the region.¹¹¹

By contrast, it is apparent that Grantham's long-term interest in the area's talc deposits paid off after the trial. Wartime conditions had forced gold operations nationally to close until 1945, but the demand for talc during this time soared on account of its uses as ceramic insulators for radio, radar, and other communications instruments.¹¹² Talc prices in California soon fetched from \$17 to \$40 per ton. Although the sizable deposits at Warm Springs proved too high in carbonates for use in military applications, the talc was usable for a variety of domestic industries, including insecticides, paint, paper, and rubber manufacture.¹¹³ Beginning production in the early 1940s, Grantham and Associates not only weathered the \$70,000 ostensibly spent on the court trial, but also managed to consolidate all talc claims in the canyon.¹¹⁴

When Indian Allotment 330 came up for auction in 1951, Grantham and Associates placed a bid in order "to keep a nuisance from being committed by someone else owning the property."¹¹⁵ Grantham's offer of \$835 far exceeded the few nominal offers of \$100 but, much to Grantham's surprise, the National Park Service opted to match her company's bid (a move allowable because of the property's location in the

¹¹⁰ Walk to Kuchel, July 20, 1954.

¹¹¹ Crum, "A Tripartite State of Affairs," 128; Crum, *The Road on Which We Came*, 119-147; Donald L. Fixico, *Termination and Relocation: Federal Indian Policy, 1945-1960* (Albuquerque: University of New Mexico Press, 1986).

¹¹² Limitation Order L-208, passed in late 1942, declared gold and silver mines to be "nonessential wartime industries." Gold production did continue during the ban, but only at a limited scale – either from mines where gold was not the principal metal, or from small-scale miners too old or otherwise unable to warrant reassignment to other mine work.

¹¹³ T.A. Klinefelter, Sidney Speil, and Sidney Goltheb, "Survey of the Suitability of Domestic Talcs for High Frequency Insulators," *U.S. Bureau of Mines Report of Investigations 3804* (Washington, D.C.: GPO, 1945); See also, W.W. Roff, "Western Talcs," *Bulletin of the American Ceramic Society*, vol. 22, no. 8 (August 15, 1943), 292-295.

¹¹⁴ The total cost of litigation is Grantham's own estimate, given in an interview with a newspaper reporter for the *Los Angeles Times*. Refer Leap, "Woman Mine Boss."

¹¹⁵ Walk to Kuchel, July 20, 1954.

national Monument). With evident irritation, Grantham contacted the Bureau of Indian Affairs as well as her attorneys who asked Senator Thomas Kuchel to look into the matter. This action proved ineffective and, in 1954, the property was transferred into public ownership.¹¹⁶

The government's purchase of the lands surrounding the mill and mining claims did not have an immediate affect on the actions of Grantham and Associates. From 1960, the Warm Springs Mine (also known as "Big Talc") became California's largest talc operation, producing around 60,000 tons annually, and accounting for one seventh of the nation's talc production.¹¹⁷ Grantham made several camp improvements at Warm Springs during this time, including the construction of several one-story cinder block buildings, some fitted with showers and flush toilets, and adding a swimming pool in front of the mess hall. Operations still remained fairly small-scale, with the company less than a dozen workers. Talc was hauled direct from the mine and no onsite processing was required.

Grantham and Associates maintained a nominal interest in working the gold claims during the postwar era. In 1946, the company supplemented the Gold Hill Mill circuit with a mechanical arrastra—a rudimentary device that crushed ore by dragging boulders around a circular rock-lined pit. The physical inspection of this device, however, reveals an absence of wear marks, implying it either saw minimal use of perhaps that it found use only for tailing reprocessing, in which the feed was already well ground to sand and silt-sized particles.¹¹⁸ An archaeological reconnaissance of the Panamint Treasure Mine conducted in the late 1970s does not support the notion that gold mining revived in the postwar era with any significant intensity. At its maximum extent, underground exploration since the 1920s had excavated a 220-foot-long drift, a few stopes, and several short side passages presumably following erratic quartz stringers (an excavation three workers could have likely accomplished in less than a year).¹¹⁹ In sum, the Gold Hill Mill probably processed less than 500 tons of ore – a volume that in all likelihood did not recoup the cost of the mill's installation.

¹¹⁶ Walk to Kuchel, July 20, 1954.

¹¹⁷ J. Robert Wells, "Talc, Soapstone, and Pyrophyllite," *Minerals Yearbook 1965*, vol. 1, Metals and Minerals (Washington, D.C.: GPO, 1966), 909; Pfizer Inc., *Big Talc Open Pit, Plan of Operations*, DEVA. Grantham sold her interest in the early 1970s, the mines had produced some 830,000 tons. Zanjani, *A Mine of Her Own*, 214.

¹¹⁸ In operation, the arrastra tended to settle gold particles atop the cobbled floor, which could then be recovered by panning. An absence of scouring on the arrastra stones may imply its use (albeit minimal) for treating tailings, which were already finely ground. For the use of arrastras as an end-recovery device refer Edward B. Preston, *California Gold Mill Practices*, California State Mining Bureau Bulletin No. 6 (Sacramento: A.J. Johnston, 1901), 58.

¹¹⁹ For an example of contemporary practices by a similarly scaled operation, refer R.C. Fleming, "A One-Man Gold Mine," *Mining and Metallurgy*, vol. 13 (1932), 86. The underground survey was conducted as part of a historic resource characterization study for the Monument. Refer Greene, *Historic Resource Study*, 108.

In lieu of this information, it is surprising that documentary evidence reveals the company actually entertained the construction of another gold mill on the property during the 1950s – one that would “probably require the use of all of the water available [at the springs].”¹²⁰ The broader context of correspondence suggests this matter-of-fact declaration was actually a thinly veiled threat responding to an increasing National Park Service interest in the springs. Shortly after the government’s acquisition of Indian Allotment 330 in 1954, the National Park Service proposed to establish a “splendid camp and picnic site” for tourists one-quarter mile from Warm Springs. Pending Grantham and Associates’ permission, the National Park Service intended to pump surplus water from the springs to the campsite, for an assessment of Warm Springs by Monument staff indicated that approximately three-quarters of the spring’s discharge went unused.¹²¹ Monument staff apparently took the company’s mill proposal at face value (one contributing factor being that changes in personnel meant no one was immediately acquainted with the historic dispute).¹²² Plans for a campsite near Warm Springs were duly shelved. The second mill was never built.

From the mid-1950s, if not before, Grantham and Associates abandoned efforts to work the gold claims. Although some cleanup and salvage activities took place, the company left the Gold Hill Mill to deteriorate on its own accord.¹²³ At present, the working surfaces of the concentration tables are greatly desiccated, the conveyor structure transferring the jaw crusher product to the secondary ore bin has collapsed, and any indications of the rubber belts once connecting milling machinery to lineshafts are gone. Despite these telltale signs of abandonment, the Gold Hill Mill still exhibits a high level of preservation – an unusual occurrence given the mill’s highly accessible location and the frequency of equipment reuse in the region.

Were it not for the trial that surrounded mining operations in the 1930s, the physical assessment of the gold mining landscape might conclude only that the Gold Hill Mill, in common with the history of many small-scale mining outfits, was constructed without extensive mine development work and seemingly without the rigorous testing of ore values.¹²⁴ An evaluation of the legal dispute over Warm Springs intimates, however, that the Gold Hill Mill represents more than what had first drawn Grantham, Ketchum, and Huhn to the area. Grantham’s use of the mill in defending her company’s interests at

¹²⁰ Fred Binnewies (Superintendent DVNM) to Regional Director, Region 4, July 30, 1954 and January 7, 1955. Both DEVA, C44375, A01240, Central Files, RG 1.

¹²¹ Walk to Kuchel, July 20, 1954. The quote derives from an earlier discussion of Warm Springs that stemmed in part from an uncertainty as to whether Grantham held water rights. T.R. Goodwin to Regional Director, July 3 and July 23, 1951. Both DEVA. L30 Landuse Indian Village.

¹²² This is implied by the absence of such discussion for internal National Park Service correspondence at the time. Refer Binnewies to Regional Director, Region 4, July 30, 1954; January 7, 1955.

¹²³ Clean-up and salvage activities are indicated by the relocation of the classifier’s raking mechanism atop the truck ramp, the absence of the conveyor mechanism, and the removal of liners and cast-iron balls from the ball mill.

¹²⁴ This practice was lamented by mining engineers and geologists. See, for instance, Charles Jackson and John Knaebel, “Gold Mining and Milling in the United States and Canada: Current Practices and Costs,” *U.S. Geol. Survey Bulletin 363* (Washington, D.C.: GPO, 1932), 68.

Warm Springs, in combination with her proposal to construct a second gold mill despite any other indications of an interest in gold mining, suggests that the mill's preservation in the present day is more than fortuitous. The Gold Hill Mill served a double life, and it arguably found greatest service in helping to legitimate and safeguard Grantham's control of Warm Springs.

CONCLUSION: ON THE POLITICS OF MINING LANDSCAPES

Coyote had a home. He hunted rabbits to make a rabbit-skin blanket. When he had a great many skins, he started to make the blanket in his house. While he was working on his blanket, he saw a shadow pass the door. He went out of the house to see what it was, and saw a woman running.

Opening of Death Valley Shoshone origin myth, told by George Hansen (Panamint George) to Julian Steward.¹²⁵

Although mining enterprises often operated in regions previously unexplored by Euro-Americans, few areas in North America were uninhabited when prospectors arrived. By the 1930s, the Timbisha Shoshone were certainly familiar with the hurried pace at which prospectors ventured into their lands, staked mineral claims, excavated outcrops, and left, disenchanted. Although mining interests in Death Valley were often ephemeral, they also entailed long-term consequences. Industrial entrepreneurs showed little concern for shared resource use, and mining activity rapidly depleted a number of resources that formed the basis for Shoshone subsistence in the region. The demand for resources was particularly acute at spring sites, which were not only critical for the viability of mining operations, but also central locations of Timbisha Shoshone settlement. The negotiation and conflict over spring sites was not limited to first encounters, but recurred whenever mining enterprises came back to Death Valley. Although few Shoshone legally owned spring sites prior to the 1930s, the Warm Springs dispute (1930-1942) occurred during a period of both elevated mining activity and increasing activity by the Timbisha Shoshone in pursuing their legal title to current and ancestral lands.

Because of Robert Thompson's status as a non-reservation Indian, the contest over Warm Springs brought head-to-head two laws historically associated with the acceleration of Indian land loss during the nineteenth and twentieth centuries. Allotments under the Dawes Act technically held superiority over claims filed under the Mining Law, but differences in the length of the claiming process worked in favor of mining interests. The speed at which Louise Grantham staked and registered her mining claims

¹²⁵ Julian Steward, "Some Western Shoshoni Myths," *Bureau of American Ethnology Bulletin 136, Anthropological Papers No. 31* (Washington, D.C.: GPO, 1943), 262.

differed markedly from the two years it took for Thompson's application to be approved (a notable improvement over the 19 years it had taken his uncle, Hungry Bill, to be awarded an allotment in Johnson Canyon). Grantham's steadfast refusal to accept the superiority of Thompson's Indian Allotment was rewarded, furthermore, by the failure of government agencies to evict Grantham from the claims. Had the court decision actually upheld Thompson's rights to Warm Springs, Grantham and Associates had worked the area for 12 years – a period exceeding the lifespan of most mining enterprises.

The mining landscape at Warm Springs indicates that the contest over water rights did not take place solely in the courtroom. In order for Grantham to support her case, claim boundaries had to be clearly marked, the mining claim needed to show evidence of investment, and the mill site needed a mill. It seems more than coincidental that both the mill's construction and the activity on the gold outcrops beside the springs occurred within the two-year window between the company's staking of claims at Warm Springs and the award of Thompson's allotment. Grantham certainly used these improvements to bolster the legitimacy and superiority of her mining interests. However, it is evident that material evidence, like documents, was not incorruptible. The location of Warm Springs at the center of Grantham's lode claim strongly suggests the presence of an ulterior motive. Although the Gold Hill Mill was certainly functional, the physical capability of the mill, its jerrybuilt construction, and the state of development on the gold mining claims impart very different impressions from those inferred by Grantham's statements. They also stand in stark contrast to the extent of development on the neighboring talc claims that occurred contemporary with and subsequent to the court trial. All considered, the scale of gold mining activity at Warm Springs, when juxtaposed with the company's lengths to defend the mining claims in court, provides sobering evidence that the leniency of the General Mining Law afforded ample opportunities for misuse by miners.

The contestation over Warm Springs in the 1930s importantly signifies that the incredible human cost of the California Gold Rush did not resolve fundamental land issues between miners and Native Americans. Euro-American efforts to the contrary, Native people had neither disappeared nor had they ceded rights to their lands. The early interactions between miners and Native Americans in California did, however, establish the mechanisms by which dispossession continued to recur in the twentieth century, including at Warm Springs. Although fraud, land speculation, and litigation are all well recognized as being rife in mining districts, the Warm Springs dispute serves as an important reminder that mining sites were also places where different value systems became superimposed and contested. At Warm Springs, these differences are perhaps no better evidenced than in the physical landscape, where a mature stand of trees shades Grantham's swimming pool from the afternoon sun, and the view from the diving board directs one's attention to the Gold Hill Mill.

APPENDIX

DIMENSIONS AND ESTIMATED TONNAGE OF MILLING EQUIPMENT AT
GOLD HILL

MACHINE	DIAGNOSTIC CHARACTERISTICS	EST. DAILY TONNAGE*
Jaw Crusher	7x10 in. opening, 1 in. gap	60
Ball Mill	3 ft. diameter x 4 ft. length	70-100
Rake Classifier	Rake-type, single trough	400
Diester Sand Table	(None ascertainable)	10-200
Plat-O Slime Table	Fully riffled**	10-200

* Tonnage calculated at tons per 24 hours. Estimates compiled from Arthur Taggart, *Handbook of Ore Dressing* (New York: John Wiley & Sons, 1927), various pp.

** Although riffles are not extant on the Plat-O Slime Table, nail marks suggest they ran the length of the table.

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