#### **United States Department of the Interior**

National Park Service

# **National Register of Historic Places Registration Form**

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property
Historic name: Alf's Blacksmith Shop DRAFT
Other names/site number: N/A
Name of related multiple property listing: N/A (Enter "N/A" if property is not part of a multiple property listing)
2. Location
Street & number:33652 - 33678 1 <sup>st</sup> Street
City or town: <u>Daggett</u> State: <u>CA</u> County: <u>San Bernardino</u>
Not For Publication: Vicinity:
3. State/Federal Agency Certification
As the designated authority under the National Historic Preservation Act, as amended,
I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.
In my opinion, the property meets does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:
nationalstatewidelocal Applicable National Register Criteria:
ABCD

Alf's Blacksmith Shop

Nan	ne of Property	County and State	
	4. National Park Service Certification		
	I hereby certify that this property is:		
	entered in the National Register		
	determined eligible for the National Registe	r	
	determined not eligible for the National Reg		
	removed from the National Register	,	
	other (explain:)		
	Signature of the Keeper	Date of Action	
	5. Classification		
	Ownership of Property (Check as many boxes as apply.)		
×	Private		
	Public – Local		
	Public – State		
	Public – Federal		
	Category of Property (Check only one box.)		
×	Building(s)		
	District		
	Site		
	Structure		
	Object		

San Bernardino County, California

<u>Alf's Blacksmith Shop</u> ame of Property		n Bernardino County, California unty and State
Number of Resources within 1 (Do not include previously liste Contributing	ed resources in the count) Noncontributing	hvildin oc
1	5	buildings sites
		sites
3	2	structures
		objects
4	7	Total
Historic Functions (Enter categories from instruction COMMERCE/specialty store  Current Functions (Enter categories from instruction CULTURE/Museum		
7. Description		
Architectural Classification (Enter categories from instruction LATE 19TH CENTURY Other: Utilitarian barn/shed	ons.)	
Materials: (enter categories from Principal exterior materials of the Foundation: Stone Walls: WOOD/vertical board		

Roof: METAL/corrugated sheet

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

# **Narrative Description**

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

# **Summary Paragraph**

The Alf's Blacksmith Shop property is comprised of a 0.789-acre parcel located in Daggett, San Bernardino County, California. It is situated on the west side of 1st Street, north of Santa Fe Street, and faces east. The parcel is roughly rectangular with a long narrow access strip running south from the main parcel to Santa Fe Street, although main access is from 1st Street. Much of the parcel can be characterized as an unpaved utility yard with little vegetation and a few mature trees. The contributing building on the property is Alf's Blacksmith Shop and there are three contributing structures; a wagon lift derrick and two ore wagons. Alf's Blacksmith Shop is located near the northeast corner of the parcel and is a one-story, barn-like, light-industrial building that measures approximately twenty-eight by thirty-six feet. It is constructed of wood, including a timber frame clad with vertical wood boards. It is topped by a corrugated metal-clad gable roof with shed extensions on two sides. It has three large barn doors and three multi-lite, wood sash windows. Alf's Blacksmith Shop is in fair to good condition and retains integrity. The property also includes a number of non-contributing elements that do not relate to the significance of Alf's Blacksmith Shop, were not present during the property's period of significance (1890-1916), or have lost integrity; including a bunkhouse, two residences, a garage, a Quonset hut-like shelter for the historic wagons, and a third wagon. Two small sheds and the vestigial site of the mule corrals are also present, but are not considered to be notable or intact enough to qualify as contributing or non-contributing elements.

# **Narrative Description**

# Alf's Blacksmith Shop

#### Site

Alf's Blacksmith Shop is located near the northeast corner of the property and faces east onto 1<sup>st</sup> Street, which runs north-south to the immediate east of the building. The building is separated from the street by a chain link fence. To the north and west is utility yard area, with the contributing wagon lift derrick to the north and a stand of mature trees located a short distance to the west. An unpaved driveway accesses the property from 1<sup>st</sup> Street on the south side of Alf's Blacksmith Shop, with the non-contributing bunkhouse located beyond.

#### Exterior

Alf's Blacksmith Shop is a barn-like, light-industrial building. The building is one-story high and has a rectangular plan. The building is constructed of timber frame sitting on stone footings set into the ground. The exterior walls are constructed of vertical wood boards. Entries consist of large openings

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

with hinged double barn doors made of vertical wood boards. Windows are multi-lite, fixed, wood sashes. The building is covered by a gable roof that transitions to a lower, shallower, shed extension on the south side. A lower lean-to bay spans the west facade and is covered by a combination shed and hip roof, with an open storage area covered by a shed roof extending to the south. The north facade includes a small shed-roofed projecting bay. The roof is clad with corrugated metal and has a ridge vent, also of corrugated metal, running the length of the roof ridge.

The primary (east) facade faces 1<sup>st</sup> Street. It consists of the shed-roofed southern portion of the building on the left, the gable-roofed portion of the building at center, and a small shed-roofed projecting bay, set back on the right. The facade is entirely clad with vertical unpainted wood boards and features two entrances; one on the right side, the other to the left of center. Both entrances have large openings with double barn doors, although the opening on the left is smaller. These doors are made of vertical wood boards with Z-bracing on the interior and are mounted on large metal strap hinges. There is no trim around the openings, nor any fenestration on the east facade. A wood sign board, reading "Blacksmith Shop" with horseshoe and wagon wheel symbols (not original) is located on the upper facade below the gable peak. The main roofline is eaveless and finished with a narrow fascia board.

The south facade faces the driveway that accesses the property from 1<sup>st</sup> Street. It includes of a shedroofed, open storage area projecting from the left side of the facade and the low shed roofed portion of the building on the right. The covered storage area is supported by heavy square wood beams at the corners and has a wood beam roof structure clad with corrugated metal. The southern wall of the building is clad with unpainted vertical wood boards. On the left side of the facade, within the covered storage area, there are a pair of horizontally-oriented, six-lite, fixed, wood sash windows with simple narrow wood trim. The right side of the facade is unfenestrated. At the roofline, open eaves with exposed rafter tails overhang slightly.

The west facade faces a portion of the utility yard. It is spanned by a low one-story bay that features an infilled window opening on the left, an entry near the center, a pair of windows on the right, and the covered storage area extending to the far right. The entry near the center features double barn doors made of vertical wood boards, with Z-bracing on the interior, mounted on large metal strap hinges. The pair of windows on the right have fixed wood sashes. The left window has three lites with vertical muntins, while the right window has a six lites. The vestiges of narrow wood board trim surrounds the windows. The roofline of the low bay spanning the facade has open eaves that overhang slightly, with exposed rafter tails. The roof of the bay has a shed form at the left end, but a hip form at the right end. The gable end of the building's main roof rises above and behind the bay and is eaveless, finished with a narrow fascia board.

The north facade faces a portion of the utility yard. A small bay projects from the facade to the left of center, and the side of the low western bay extends to the right. The facade has one window on the west-facing wall of the small projecting bay, which is a two-lite, fixed, wood sash with a horizontal muntin and mismatched flat board trim. The roofline of the projecting bay has shallow eaves with thin fascia boards on the east and west sides and only the slight overhang of the corrugated metal roofing on the north side. The roofline of the main facade has open eaves with exposed rafter tails that overhang

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

slightly. The shed roofline of the bay that extends to the west is eaveless, with the ends of small dimension purlins visible though not projecting.

#### Interior

The interior of the building consists primarily of a single open space, with only the small projecting bay on the north side of the building (housing the bellows room) constituting a semi-enclosed room off the main space. Floors throughout the building are bare packed dirt with thick wood plank flooring in two areas. The walls consist of the exposed timber structure and the inside of the exterior wood board siding, as the building is of single-wall construction. Vertical support posts, some with diagonal knee braces at the top, are present, particularly at the junction of the gable roof with the southern shed roof. The interior of the roof consists of exposed wood trusses, purlins, and rafters and the inside of the corrugated metal roof cladding.

Although undivided, the interior space has some defined functionally-related spaces. The aforementioned bellows room is one of the locations with a wood plank floor and is separated from the main space by a heavy metal panel mounted to the building's structural framing. The panel shielded the bellows room from the heat of the forge, which is located on the other side of the wall (within the main space) and consists of a poured concrete hearth platform. The bellows provided air to the hearth on the other side through the partition. The hearth includes another metal heat shield, formed channels in the top surface, and a formed cooling trough on one side. Nearby is a wooden crane arm mounted to a rotating vertical post, used for lifting large objects from the forge area and swinging them over to be placed on a piece of equipment, such as an anvil or a tire spreader/bender.

In the southeast corner of the building, there is an additional section of heavy wood plank floor, which is where horses were shod. A heavy horizontal plank mounted on the wall and affixed with iron rings is where the horses were tied while being shod. The horseshoeing (or farrying) area relates to the smaller (southern) set of barn doors on the primarily facade, through which horses would have been lead. <sup>1</sup> Meanwhile the larger set of doors accesses an open path through the main space that aligns with the doors on the rear (west) facade; serving as a way for smaller wagons and equipment to be moved through the building from front to rear.

A simple wood desk with a hinged top is mounted to the center of the southern wall and was likely where ledgers and other business materials were kept or small-scale work performed. Another heavy wooden work bench is located along the western wall at the southwest corner of the building and is illuminated by the windows in the south and west walls; a prime area for small-scale work.

The interior of Alf's Blacksmith Shop is otherwise characterized by wood shelving, work benches, pegs, and racks that project from the walls or vertical posts in many places, or are located around the space. A full compliment of blacksmithing tools remain in the building, as does a rack of horse and

These doors are known to have been added after construction, but are one of the very few alterations the building has undergone. "The Alf's old blacksmith shop in 1894" (photograph), Walter S. Alf Photograph Collection, Daggett & Calico Historical Society, Daggett, California.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

mule tack; including harnesses, singletrees, collars, and bits. The collars bear brass lettering reading "S. Alf."

A wooden wagon lift derrick and numerous pieces of other equipment, including an extensive collection of wooden singletrees, associated with Alf's Blacksmith Shop are located in the yard and in the wagon shelter to the north and west of the building. The interior of Alf's Blacksmith Shop, including its many original contents, contribute to the historic significance of the property.

#### **Condition**

The building is in fair to good condition; intact, but with weathered materials and components, such as aged wood board siding, some rusted corrugated metal roofing, and deteriorated window sashes and glazing putty. There is little evidence of rot, infestation, or serious deterioration, while some replacement wood members have been installed (replacing original components in-kind) to remedy deterioration and keep the building plumb and sound. The building is secure and well-roofed against the weather, but not completely weather tight. This is due to the shrinkage and warping of wood boards over time. This permeability is also in part by design, however; as passive ventilation was desirable in the hot smoky environment of a blacksmith shop.

## Other Contributing Resources

Three additional structures on the property relate to the historic significance of Alf's Blacksmith Shop. They consist of a wagon lift derrick and two ore wagons.

#### 1) Wagon Lift Derrick

The wagon lift derrick is located in the utility yard to the immediate north of Alf's Blacksmith Shop. It is a simple timber structure ten to twelve feet tall that consists of two A-frames joined by a horizontal cross bar at the top. The structure is reinforced with additional wood braces and held together by iron bolts and plates. It was used to lift wagon beds onto and off of their chassis for wagon building and maintenance.

#### 2) Ore Wagons

Two ore wagons are located within the modern, non-contributing wagon shelter west of the Blacksmith Shop and bunkhouse. They are not twenty-mule team borax wagons, being of smaller dimensions, but exhibit similar characteristics and were built at Alf's Blacksmith Shop for use in other local mining activities. The two wagons are nearly identical to each other in design and were intended to be linked to one another. They have long rectangular wagon beds with high sides and canted boards at the top. They are made of wood boards that are held together with iron bolts and plates, while horizontal chains span the top of the wagon beds, tying the sides of the wagons together to keep them from being pushed outward by loads of ore. The wooden wheels have iron tires and the rear wheels are larger than the front wheels, having sixteen spokes while the front wheels have fourteen. The wagons exhibit other features such as tongues and trees, axles and chassis components, "lazy boards" to support a water barrel on the side, brake shoes, iron brake levers, and iron tailgate ties.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

# Non-Contributing Buildings and Structures

The property includes seven non-contributing elements that do not relate to the significance of Alf's Blacksmith Shop, were not present during the period of significance, and/or have lost integrity. They are:

### 1) Bunkhouse

Most prominent is the bunkhouse south of Alf's Blacksmith Shop. This partial-adobe building was present in the early 1880s - prior to and during Alf's Blacksmith Shop's period of significance (1890-1916) - and relates to the property's significance, as it was used as bunkhouse by the smiths, wagon builders, and teamsters who were employed by Alf. Prior to its use as a bunkhouse it had served as a home for the Alf family when they first arrived in Daggett and after its use as a bunkhouse (ending in 1916), the building became a single-family residence occupied by Walter Alf (Seymore Alf's son) and his family. Primarily during the Walter Alf residential period, additions were made to the building that subsumed the original two-room adobe structure by adding porches and rooms (including kitchen and bathroom) on all sides. The roof form also appears to have been changed to cover the expanded building. Occupancy by Walter Alf and family lasted from 1918 to 2013 and alterations appear to have occurred throughout that period. Thus, the bunkhouse has been altered to such an extent that it no longer possesses the integrity required to convey its age or the role it played in relation to Alf's Blacksmith Shop.

The bunkhouse is a one-story, rectangular-plan building, with a combination gable-on-hip and gable roof clad with corrugated metal. Much of the structure sits on a stone foundation. The exterior is clad with horizontal wood siding, wood board-and-batten siding, and vertical-groove plywood. Windows are wood sash in multi-lite fixed, double-hung, and double-casement configurations. The primary entrance – a partially-glazed paneled wood door covered by a metal security gate – is located on the north facade. The northeast corner of the house originally featured an open integral porch, but it has been screened in with heavy metal mesh.

# 2) Wagon Shelter

A barrel arched, corrugated metal, Quonset hut-like structure shelters the historic wagons, but was erected circa 2015 and is not associated with the significance of the property. It is approximately 50 feet long and has low wooden side walls on which a pre-fabricated modular wooden arch system sits. It is clad with sheets of corrugated metal and some corrugated fiberglass for interior illumination.

# 3) Overland Wagon

A third wagon is located within the Quonset hut wagon shelter, along with the two contributing ore wagons. It dates to the late-1870s and is associated with the Alf family, having served as their overland transportation from Iowa to California, but is not directly associated with the significant history of Alf's Blacksmith Shop. Originally a covered wagon, the vehicle has a long rectangular bed with relatively low sides made of horizontal wood boards held together with iron bolts and plates. The wooden wheels have iron tires and the rear wheels are slightly larger than the front wheels, having fourteen spokes while the front wheels have twelve. The wagon originally had a flat board seat near the front (only supports remain) and a dashboard in front with a wood "jockey box" or tool storage box mounted

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

beneath. The wagon exhibits other typical features such as axles and chassis components, a "lazy board" to support a water barrel on the side, and other cargo mounting brackets and metal tie rings on the sides. It originally had wooden bows that would have supported a canvas cover, but they have been cut off above the top of the wagon bed. In 1964, a 500 gallon metal water tank was installed in the bed to represent one of the water tender wagons that was pulled behind ore wagons.<sup>2</sup>

# 4) Southern House

There is a small house located at the south end of the parcel. It is a simple bungalow that is not related to the significance of the property and appears to have been built or moved to the site after 1960. It is a simple one-story, rectangular building with a front-gable roof clad with corrugated metal. The walls are clad with stucco and it has mismatched wood sash windows. There is a full-width, gable roof porch on the primary facade.

# 5) Utility Building

A utility building is located at the south end of the parcel behind the bunkhouse. It is one-story, has a L-shaped plan, is clad with sheet metal, and has a gable roof clad with corrugated metal. It has no windows, but has flush metal side-hinged doors in person- and service-sized openings. A broad canopy supported by metal posts projects from the east facade. It does not appear to have been present on the property prior to 1960.

#### 6) Northern House

A house at the northern end of the parcel appears to consist of an older portion with a newer portion, possibly modular, appended to its east side. A structure appears to be present in the same location in 1950s aerial photos, but it was much smaller and a historic photograph from 1965 suggests a different appearance and features from the building that exists today. In any case, the house appears to lack integrity and does not relate to the significance of the property. It is one-story, has a rectangular plan, and is topped by a broad, shallow gable roof in two perpendicular sections that is clad with corrugated metal. The exterior walls are clad with wood board-and-batten siding and the primary window type is a sliding aluminum sash, with some double-hung wood sashes present on the west facade. There are two entries, consisting of flush wood doors covered with metal security gates, on the south facade.

#### 7) Garage

At the southwest corner of the northern house is a garage that is also not associated with the property's significance and appears to have been constructed relatively recently. It is one-story, has a rectangular plan, and a side-gable roof clad with corrugated metal. The exterior walls are clad with stucco and the east facade features a flush wood person door covered by a metal security gate, and a paneled metal roll-up garage door.

Two small wood sheds are located near the center of the property in addition to fencing and various pieces of equipment and artifacts scattered throughout. The origin and age of most of the sheds and other elements are unknown, they are known to have been moved to and around the property at various

Photograph of water tank being installed in wagon bed, June 1964; Walter S. Alf Photograph Collection, Daggett & Calico Historical Society, Daggett, California.

Alf's Blacksmith Shop	
Name of Property	

San Bernardino County, California
County and State

times, and they are not considered to be notable enough to qualify as contributing or non-contributing elements. There is a small corral and loafing shed located at the south end of the non-contributing garage (#7, above), at the west side of the property. It very loosely relates to the original mule corrals, also located on the west side of the property, but which would have been much larger in order to house sixty to ninety animals and were mostly situated on what are now separate adjacent parcels to the west. The corral area no longer retains any of the fencing or other features that would indicate its historic use. The small vestigial corral that remains within the boundaries of the nominated property is made up of modern metal pipe fencing, and has a wood and corrugated metal loafing shed within it that does not appear to date to the period of significance, has been altered, and does not adequately convey the extent or character of the original corrals.

ppear to da	tal pipe fencing, and has a wood and corrugated metal loating shed within it that does not the period of significance, has been altered, and does not adequately convey the extra of the original corrals.
	ement of Significance
	ble National Register Criteria " in one or more boxes for the criteria qualifying the property for National Register
×	<b>A.</b> Property is associated with events that have made a significant contribution to the broad patterns of our history.
×	<b>B.</b> Property is associated with the lives of persons significant in our past.
	C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
	<b>D.</b> Property has yielded, or is likely to yield, information important in prehistory or history.
	Considerations "in all the boxes that apply.)
☐ A. O	wned by a religious institution or used for religious purposes
☐ B. Re	emoved from its original location
☐ C. A	birthplace or grave
□ D. A	cemetery
□ E. A	reconstructed building, object, or structure

lf's Blacksmith Shop_	San Bernardino County, California
ame of Property	County and State
☐ F. A commemorative property	
G. Less than 50 years old or achieving signal.	gnificance within the past 50 years
	1 ,
Areas of Significance	
(Enter categories from instructions.)	
INDUSTRY	
COMMERCE	
D: 1 - f C!: f'	
<b>Period of Significance</b> 1890 - 1916	
1890 - 1910	
Significant Dates	
<u> 1890 - 1916 </u>	
Significant Dayson	
Significant Person (Complete only if Criterion B is marked about	ave)
Alf, Seymore Sylvester	.,
<u>=,,</u>	
Cultural Affiliation	
Euro-American	
Architect/Builder	
Unknown	

**Statement of Significance Summary Paragraph** (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

Alf's Blacksmith Shop is individually significant at the local level under National Register of Historic Places (NRHP) Criterion A for the important role it played in the borax mining industry of the Mojave Desert. It is the best representation, other than the few surviving ore wagons themselves, of the construction and operation of the iconic twenty mule team borax wagons, because it was the location where many of those wagons were built and maintained, and where the mule teams were corralled during the Borate period of borax mining in the Mojave Desert (1890-1898). It is also significant under criterion A for its associations with the development of transportation routes and other infrastructure throughout San Bernardino County, which resulted in regional growth, transportation improvements,

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

and commercial success during the late-nineteenth and early-twentieth centuries. Alf's Blacksmith Shop served as the headquarters and maintenance facility for teams, equipment, and labor that was contracted to mining companies, railroads, and the County of San Bernardino for building much of the region's transportation infrastructure. Such projects facilitated transportation routes, including legendary Route 66, that remain in use today and stimulated settlement and commercial growth throughout Southern California.

Alf's Blacksmith Shop is also significant under Criterion B for its associations with, and as the most notable representation of, the work of prominent local entrepreneur and businessman, Seymore Alf. Alf was involved in numerous local business ventures, foremost among them Alf's Blacksmith Shop, which influenced the physical and commercial character of the Mojave Desert region.

Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

# **CRITERION A: EVENTS**

Alf's Blacksmith Shop is individually significant at the local level under NRHP Criterion A for the important roles it played in the borax mining industry of the Mojave Desert and the development of transportation routes and other infrastructure throughout San Bernardino County.

Alf's Blacksmith Shop is eligible in the Area of Significance of Commerce – the business of trading goods, services, and commodities – because it functioned as a place of specialty business, providing services such as wagon building and equipment manufacturing, repair, and maintenance, as well as the leasing of teams of animals. In so doing, it employed skilled laborers like smiths, wagon builders, and teamsters. It, thus, contributed to the local and regional commerce and economy, and made possible the activities of borax mining and road and infrastructure building in the Mojave Desert. The mining and infrastructure-building activities that were made possible by the products and services of Alf's Blacksmith Shop subsequently represent Commerce in that mining was a significant regional business of extracting, transporting, producing, and trading raw materials that eventually became goods (borax and borax products) for sale nationwide. The teamsters, wagons, and mule teams that were owned, leased, and employed by Alf's Blacksmith shop were the only means of transportation for borax mining commodities during a significant period in borax mining history and, therefore, contributed significantly to mining-related commerce. Similarly, infrastructure-building enabled by the products, equipment, services, and labor that was supplied by Alf's Blacksmith Shop created a network of roads, rail lines, and other facilities on and by which commodities were moved around the region and nation, facilitating business and economic activities on a far-reaching scale.

The blacksmith shop is also eligible in the Area of Significance of Industry – the technology and process of managing materials, labor, and equipment to produce goods and services – because it was a relatively self-sufficient manufacturing facility for vehicles and equipment that physically illustrates the materials used and products manufactured (as evidenced in the contributing ore wagons), the tools and technology utilized (still extant throughout the shop and in the contributing wagon lift derrick), and even the activities of workers within the shop (illustrated by the various work areas evident within the

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

shop). The activities of wagon building, equipment manufacturing, repair, and maintenance, and horse shoeing, required specialized tools and technologies of the time period; namely the many small smithing tools and pieces of larger equipment like the forge, tire spreaders/benders, and contributing wagon lift derrick. Those pieces of equipment, coupled with the specialized activity areas within the shop, allows Alf's Blacksmith Shop to clearly demonstrate the technologies and processes of the particular industry represented by the shop, making it more than just the site of historical activities, but a modern exhibit of those activities. The industrial processes and technologies represented by Alf's Blacksmith Shop, in turn, relate to significant historical events, in that they enabled the shop to efficiently and effectively provide the products, services, and labor that made borax extraction and transportation from the Borate mine, and the building of regional infrastructure routes and facilities, possible.

#### Borax Mining in the Mojave Desert & the Twenty Mule Team Wagons (1881 – 1907)

Borax is a naturally-occurring alkaline mineral that has a wide range of industrial and household uses; from metal soldering, glass manufacturing, enameling, ceramic glazing, and tanning, to use as a household pesticide and laundry booster. It most often occurs in dry lake beds and desert areas in a mineral form known as ulexite, and is plentiful in California and Nevada, particularly the Mojave Desert region.<sup>3</sup>

Ulexite (which is the form of the mineral borate that is found in surface deposits and refined to produce borax) was initially discovered in Death Valley in 1873, but was dismissed as a profitable mining opportunity due to the region's harsh conditions and remoteness. It was rediscovered in 1881 by prospectors Aaron and Rosie Winters, and finally considered a viable commercial venture because railroads were beginning to expand lines into the area – from the north through Owens Valley and east to west across the Mojave – increasing the potential for easy access and ore transport to refineries and market.<sup>4</sup>

The Winterses enlisted the help of Francis Marion "Borax" Smith and William Tell Coleman, two of the biggest borax producers in the country. The men were friendly competitors, who – at least in relation to their Death Valley interests – worked together in the respective roles of producer (Smith) and distributor (Coleman), with Coleman financing much of Smith's operation. They established the Death Valley Borax & Salt Mining District in November 1881 and staked numerous claims over a four thousand acre area. Coleman and Smith eventually bought out the Winterses' interest and borax became a going concern in Death Valley.

Further prospecting established the Eagle Mountain Borax & Salt District, the Monte Blanco Borax & Salt Mining District, and Eagle Borax Works, as well as numerous other small claims. Most came to be owned by Coleman, who formed individual corporate entities to manage the claims and, eventually,

<sup>&</sup>lt;sup>3</sup> "Borax." Wikipedia. 11 August 2023. URL: https://en.wikipedia.org/wiki/Borax.

<sup>&</sup>lt;sup>4</sup> Richard E. Lingenfelter, *Death Valley & the Amargosa: A Land of Illusion* (Berkeley, CA: University of California Press, 1986) 173.

<sup>&</sup>lt;sup>5</sup> George H. Hildebrand, *Borax Pioneer: Francis Marion Smith* (La Jolla, CA: Howell-North Books, 1982) 26.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

one – the Harmony Borax Mining Company – to undertake the mining and refining operations. Coleman's California Chemical Company, based in a converted soap factory in Alameda, on San Francisco Bay, handled the final purification, packaging, and distribution of the product.<sup>6</sup>

In late 1882, Isadore Daunet's Eagle Borax Works was the first to transport borax out of Death Valley. Daunet refined his ulexite on site, then contracted with Nevada freighter James McLaughlin to haul the refined borax about one hundred miles by wagon to the town of Daggett, which was located on the convenient Atlantic & Pacific Railroad line (an early company that eventually became part of the Santa Fe Railroad). McLaughlin hired Ed Stiles to drive the first wagon load of borax to Daggett, via Wingate Pass with a twelve-mule team, taking eleven days.<sup>7</sup>

William Tell Coleman's more sophisticated borax works were completed and operational in early 1883. By the summer of that year, his Amargosa Borax Works, located east of Death Valley, began shipping refined borax. Death Valley-based Harmony Borax Works then followed in the autumn of 1883. Coleman hired freighter Charles Bennett to haul the borax, establishing an eastern route from Amargosa to Daggett via Saratoga Springs. Bennett later forged a route west to the competitor Eagle Borax Works to use its already-established route via Wingate Pass. Ultimately, finding the routes to Daggett too difficult, Bennett simply bypassed the town in favor of the longer but easier route to the railroad town of Mojave, to the west.<sup>8</sup>

Financial fluctuations in the borax industry caused Coleman to drop Bennett's contract when it expired in 1884 and take freighting operations in-house. Up to this time, although long-line teams of twenty or more mules and horses had been used for hauling, the wagons had been common freight wagons. John W.S. Perry, Coleman's borax works foreman, who organized teaming operations for Harmony Borax Works, designed massive ore wagons to be hauled in pairs (sets) by teams of eighteen mules and two draft horses. Ten such wagons were built (five sets) and the "twenty mule team wagons" were born. Perry's five sets of wagons were in continual service, hauling borax out of, and supplies into, Death Valley on a clockwork schedule for four years. It is said that not one wagon or mule was ever lost to accident during this time; although the fate of drivers and swampers 10 included slightly more drama and death.

Borax mining and freighting by twenty mule team wagon continued until May 1888 when Coleman went bankrupt and Harmony Borax Mining Works shut down. Borax shipping out of Death Valley ended. Francis Marion Smith bought out Coleman's interests, achieving the title of "Borax King" and earning the honorific middle name of "Borax." He consolidated all his mining operations under the name Pacific Coast Borax Company in 1890 and began shifting the company's focus away from the waning surface deposits of ulexite in Death Valley and toward the development of underground

<sup>&</sup>lt;sup>6</sup> Ibid., 174-180.

<sup>&</sup>lt;sup>7</sup> Lingenfelter, 178.

<sup>&</sup>lt;sup>8</sup> Ibid., 182.

<sup>&</sup>lt;sup>9</sup> Ibid.

The swamper was the wagon brakeman and assistant to the driver.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

colemanite mines near Calico. (Colemanite is the form of the mineral borate found in underground deposits and, like ulexite, is refined to produce borax.)

Although it was said that the "twenty mule team days were over... the great wagons and teams dispersed," this was not true. <sup>11</sup> Smith's Pacific Coast Borax Company sold off three of the five sets of Harmony borax wagons to other freight operations; with one of these sets ultimately left stranded at the north end of Death Valley. The remaining two sets were reassigned to Smith's newly productive borax mines near Calico, at a site known as Borate. These latter two sets of wagons that remained in service were supplemented by a set built and owned by Daggett teamster Seymour Alf, who followed but improved upon Perry's wagon design. <sup>12</sup> As production at Borate increased and one set of Smith's wagons was destroyed in a wreck, Smith contracted with Alf to build another one, or possibly two, 13 sets of wagons to be leased, along with the requisite mule teams, to the Borate mine. These wagons, some driven by Alf himself, hauled ore 11 miles to the railroad hub in Daggett. <sup>14</sup> Within a year, the Borate colemanite mines became the principal source of borax in the country and then became almost the only source for fifteen years following. <sup>15</sup>

Eventually, Francis Marion Smith became discontent with the cost of operating the twenty mule teams and attempted to replace them. His first try, using a steam traction engine called "Old Dinah" failed, and, ironically, a twenty mule team had to be enlisted to pull the engine from the deep sand it mired itself in. In 1898, Smith was more successful, building the narrow-gauge Borate-Daggett Railroad, which was served by two steam locomotives. The rail line initially carried refined ore the eight miles between Marion – another ore processing plant on the north side of the Calico dry lake bed – to the standard-gauge rail junction in Daggett. Twenty mule teams continued hauling raw ore the remainder of the route between the mine and Marion. Later, the rail line was completed to the mine, itself, and the last of the twenty mule team wagons became obsolete and were decommissioned.

By 1907, the underground colemanite mines at Borate had reached such a depth that further excavation was cost prohibitive, so Smith turned back to Death Valley for as-yet-untapped underground colemanite deposits (rather than surface ulexite, as before). There, the Lila C mine was isolated, but located just southwest of Death Valley Junction and the main line of Smith's own Tonopah & Tidewater Railroad. Smith initiated construction on a branch line to the Lila C, but it took three years to build and with the mine already churning out ore he was in a pinch to transport that ore out of Death Valley until the branch line was completed. As a solution, Seymore Alf was enlisted to bring his ore wagons and mule teams up from Daggett and put them to work again. <sup>16</sup> They were loaded with

<sup>&</sup>lt;sup>11</sup> Lingenfelter, 185.

<sup>&</sup>lt;sup>12</sup> Harold O. Weight, 20 Mule Team Days in Death Valley (Twenty-Nine Palms, CA: The Calico Press, 1955) 14.

<sup>&</sup>lt;sup>13</sup> Barstow Desert Dispatch, 18 Feb 1943.

<sup>&</sup>lt;sup>14</sup> "Alf's Blacksmith Shop put History and Daggett on display" San Bernardino Sun, 3 Oct 1974.

Greene, Linda W. and John A. Latschar. Death Valley National Monument: Historic Resource Study: A History of Mining. Denver, CO: Historic Preservation Branch, Pacific Northwest/Western Team, Denver Service Center, National Park Service, U.S. Department of the Interior, March 1981.

<sup>&</sup>lt;sup>16</sup> Lingenfelter, 387.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

colemanite at the Lila C mine and hauled 28 miles to the main Tonopah & Tidewater line. This went on from early-June to late-August 1907, when the branch rail line to the mine was finally completed.<sup>17</sup>

Ultimately, the twenty mule team wagons operated for only about twelve years; four in Death Valley, eight at Borate, and a summer at the Lila C mine. Despite this short history, iconography of the twenty mule teams and their gigantic wagons lives into the present day, as Smith's Pacific Coast Borax Company eventually immortalized the mule and wagon rig in their "20 Mule Team Borax" brand that is still emblazoned on packaging sold today. <sup>18</sup> Western mythology about the twenty mule team wagons abounds, promulgated by the likes of the "Death Valley Days" radio and television programs (1930-1970) that were sponsored by the Pacific Coast Borax Company; appearances made by wagons and teams at events like the 1904 St. Louis World's Fair, the Pasadena Rose Parade and Woodrow Wilson's presidential inauguration in 1917, the 1936 dedication of the San Francisco-Oakland Bay Bridge, the 1950 California Centennial Celebration, the 1983 Los Angeles County Fair, the 1999 Rose Parade; and even in current festivals like Bishop Mule Days, where a team of twenty mules and replica ore wagons are put on parade each year.

Cultural nostalgia for borax and the twenty mule teams tends to focus on the Harmony Borax Works period and the brief but legendary run of the J.W.S. Perry-designed wagons hauling ulexite ore out of Death Valley (1884-1888). It overlooks the lengthier and more nuanced history of colemanite's eclipse of ulexite as a source of borax, mining during the later Borate period, and the freighting work done by Seymore Alf's wagons and mule teams out of Daggett (1890-1898). This later period was critical to Smith's advancement of the borax industry after Coleman's failure, the lucrative shift from ulexite to colemanite mining, and the continued operation of the iconic twenty mule team wagons as late as 1907. Although Perry's wagons were glorified for their associations with the sensational Death Valley borax haul, it was Alf's wagons and twenty mule teams that transported borax into the twentieth century.

# Alf's Blacksmith Shop

The origins of Daggett's very first blacksmith operation are murky. The Boreham family – father, George, and son, William "Bill" J. Boreham – were well-established blacksmiths in the San Bernardino area as early as the 1860s. Some accounts claim that the Borehams operated a blacksmith shop at Forks of the Road (an early name for the Yermo/Daggett vicinity) as early as 1883 and may have built some of the J.W.S. Perry-designed Harmony Borax Works twenty mule team wagons there. <sup>19</sup> If this is the case, it is possible that Seymore Alf bought out the Borehams' blacksmith concern when he came on the scene in 1886 or he may have established his own competing shop. The latter seems unlikely, however; as Bill Boreham and Seymore Alf would eventually join forces, with Boreham working as a smith in Alf's shop.

<sup>&</sup>lt;sup>17</sup> Greene and Latschar, 386-87.

<sup>&</sup>lt;sup>18</sup> "Pacific Coast Borax Company;" Wikipedia. 28 June 2023. URL: https://en.wikipedia.org/wiki/Pacific Coast Borax Company

Bright & Chute Wagon Works and Van Doren Wagon factory, both based in San Bernardino, are other names that have been associated with the construction of the Perry-designed wagons. "Twenty Mule Teams of Death Valley had 20-Day Journey," San Bernardino Sun, 28 December 1952.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

In either case, the presence of a blacksmith shop in Daggett – perhaps even one that had built the first twenty mule team wagons – was concreted by 1886. The first shop burned within a few years, however; and a second shop – that which stands today – was built in 1890. No records or photographs of the first blacksmith shop exist, but it seems likely that the current blacksmith shop, as a practical and utilitarian structure, may have been built in generally the same location, arrangement, and appearance as the first, in order to get it up and running again as quickly as possible. It was located next to the Alf's adobe house, which was converted from a family home to a bunkhouse where Alf's smiths and teamsters lived. <sup>20</sup>

From the late 1880s onward, the business of Alf's Blacksmith Shop was a going concern. It was a critical hub for freight hauling operations in the area and "the place to have anything fixed" for locals and travelers. Alf kept sixty to ninety head of mules and horses in a corral to the west of the bunkhouse and blacksmith shop. These he employed in his own work and also leased out to others, including those running freight hauling operations. With not only borax, but silver and other valuable ores being hauled out of the surrounding desert daily, and a pre-automobile town bustling in the vicinity, twenty mule team wagons were not the only vehicles being built and maintained at Alf's Blacksmith Shop. It also provided traditional horseshoeing and wagon repair services, tool manufacturing, and construction and repair of mining, construction, and road-grading equipment. <sup>23</sup>

At the time the shop was built, or shortly thereafter, a set of twenty mule team wagons was under construction at Alf's Blacksmith Shop. In 1890, when Francis Marion Smith took over William T. Coleman's borax interests, he established the Pacific Coast Borax Company and relocated his borax mining activities to Borate. Smith transferred two sets of the original Perry-designed ore wagons to Borate from Death Valley and, somewhat prematurely, disposed of the rest. Possibly because it was more financially advantageous, Smith contracted with Seymore Alf to supply an additional set of wagons for the haul. With the foresight of a savvy entrepreneur, Alf purportedly had a set of wagons in the works and owned a blacksmith shop that could handle wagon maintenance, which was conveniently located in the same town to which the Borate ore was hauled. Using Alf's services was probably more efficient and convenient for Smith than building, outfitting, manning, and maintaining wagons and mule teams in-house.<sup>24</sup> As production increased, and when one of Smith's two sets of wagons that had been transferred from Death Valley was lost in a wreck, he commissioned Alf's Blacksmith Shop to build at least one or two more sets as supplements and replacements.

Seymore Alf, himself, was not a blacksmith, but hired local smiths to work in his shop. The primary one appears to have been prominent itinerant smith Bill Borham, mentioned previously. Borham worked as the blacksmith at the Borate mines for a time, but is also seen in historic photos standing in

Patricia Jernigan Keeling, ed., Once Upon a Desert (Barstow, CA: Mojave River Valley Museum Association, 1994), 172. "Grand Marshal Named," San Bernardino Sun, 1 Aug 1982.

<sup>&</sup>lt;sup>21</sup> John M. Swisher, *Mojave Rendezvous: True Old Desert Tales* (J.M. Swisher, 1997) 27.

<sup>&</sup>lt;sup>22</sup> Keeling, 172.

<sup>&</sup>lt;sup>23</sup> Ibid.

Jack Edward Branstetter, "Tales and Trails of the Twenty Mule Teams (part 3)," *Hi-Desert Spectator*, vol.2, no.8, November 1963. Weight, 14.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

front of Alf's Blacksmith Shop. From at least 1893 to 1897, Borham helped build and repair wagons at Alf's shop; fabricating the metal parts, while other men built the wooden parts of the wagons. <sup>25</sup> Boreham's purported early experience building the Perry-designed twenty mule team wagons was likely a boon to Alf's efforts in the same undertaking.

Alf's contracting with Pacific Coast Borax Company continued until 1898, when the Borate-Daggett Railroad supplanted the twenty mule team wagons on the route from the mine to the rail junction. Although Alf's twenty mule team wagons were called into service for one more summer in 1907 at the Lila C mine, the prospects for future need dimmed as the twentieth century approached. From time to time, the giant wagons and long line teams may have been contracted to other mining operations. Alf is know to have leased two small ore wagons, with about a six-ton capacity each (a little over half the capacity of a borax wagon), to a Mr. Gimmel who was purported to have hauled the last load of silver ore out of Calico by team. Those two wagons are still located at Alf 's Blacksmith Shop today and are contributing resources to the property. <sup>26</sup>

Calico's silver deposits played out about the same time that the Borate borax mines closed. As mining operations in the immediate area of Daggett ended, Alf's Blacksmith Shop stayed in business by continuing to supply the local populace with wagons, equipment, and animals. In 1911, the *Barstow Desert Dispatch* reported that a citizen of Barstow had "recently purchased a fine span of mules, wagon, and harness from Seymore Alf to haul ore," and that "Alf has several more fine mules and wagons for sale cheap." In 1914, it was reported that he continued to rent horses to people. These services were rendered in parallel to the infrastructure building projects that would become Alf's mainstay after the borax mining era ended, and Alf's Blacksmith Shop remained active until 1916. The bunkhouse also went out of use about that time and in 1918 became the family home of Seymore's son, Walter. It was altered extensively for use as a single-family residence, thus negating its integrity as a contributing feature of the property.

# Alf's Twenty Mule Teams & Wagons

As a blacksmith shop proprietor, but not employed in the blacksmithing trade himself, Seymore Alf worked as a teamster. According to his son, Walter, who often rode with his father as a child, Alf was active in driving his own wagons. This continued the work he had started as early as 1883, driving freighters to and from San Bernardino. Sometime after 1890, when his additional sets of twenty mule team wagons were built and put into service for the Pacific Coast Borax Company, Alf hired Ed Pitcher, local expert mule skinner and later constable of Barstow, and Charles Cortwright as additional drivers. Cortwright also assisted in training the mules for the complex task of being part of a "long line" team. <sup>30</sup> Another prominent local, Adolphus "Dolf" Nevares, an early Death Valley prospector and

<sup>&</sup>lt;sup>25</sup> Branstetter.

<sup>&</sup>lt;sup>26</sup> Gertrude Alf, written marginalia in Branstetter, Daggett & Calico Historical Society Collections.

<sup>&</sup>lt;sup>27</sup> Barstow Desert Dispatch, 24 March 1911.

<sup>&</sup>lt;sup>28</sup> Barstow Desert Dispatch, 27 February 1914.

<sup>&</sup>lt;sup>29</sup> Gertrude Alf, written photo caption on back of undated (1960) photograph; Walter S. Alf Photograph Collection, Daggett & Calico Historical Society.

<sup>&</sup>lt;sup>30</sup> "Twenty Mule Teams of Death Valley had 20-Day Journey," San Bernardino Sun, 28 December 1952.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

later caretaker of Pacific Coast Borax Company's Death Valley properties, worked for Alf as a swamper (wagon brakeman and driver's assistant) during part of the Borate period.<sup>31</sup>

#### The Wagons

The specifications of J.W.S. Perry's Death Valley borax wagons are well documented. The wagon beds were sixteen feet long, four feet wide, and six feet deep. They rolled on wooden wheels that were five feet in diameter at the front and seven feet in diameter at the rear, each with iron tires eight inches across and one inch thick. The hubs of each wheel were eighteen-inches in diameter and the wheel's split-oak spokes were four inches wide at the point (nearest the hub) and five-and-half inches wide at the butt (nearest the rim). The axles were steel rods, three-and-a-quarter to three-and-a-half inches thick. The wagons were purportedly made of hickory wood, possibly cured in oil and seasoned in the dry desert air. A single wagon weighed about four tons unloaded, and could carry more than ten tons of cargo. Because the building process took so long (six months to a year), it is likely that the five sets of Perry-designed wagons were not built all at once, but throughout the Death Valley period, as evidenced by a statement from Perry's wife, who said that some of the wagons were still being built as late as 1887.<sup>33</sup>

The wagons built in Alf's Blacksmith Shop had similar specifications, but were customized slightly, and although the original Perry-designed wagons were lauded as triumphs of engineering and sturdiness, Alf's improved on the originals in functionality and efficiency. They maintained the same iconic hitching sequence of two wagons and, as needed, a water tender at the rear, but they differed from the Perry wagons, and even among themselves to some extent, in having some or all of four distinctive characteristics. The first, which all Alf wagons seem to have exhibited, was a count of sixteen spokes on the large rear wheels of each wagon, rather than the eighteen spokes found on the Perry wagons.<sup>34</sup> Some Alf wagons also have horizontal boards at the top of each bed that are angled out, increasing the wagon's capacity for higher piles of ore. This was a particular development for the Borate mines, as ore was hauled out loose rather than bagged, as it had been in Death Valley. Another development to that end, was the incorporation of horizontal lift gates on the back of Alf wagons, allowing the loose ore to be shoveled out, whereas the Perry wagons had had vertically-hinged double gates more conducive to removing bagged ore. 35 Lastly, Alf wagons were built slightly more compactly to work better in the difficult terrain around the Borate mine; specifically, a steep, narrow grade passing through Mule Canyon. In early days of the Borate operations, one of the more massive Perry wagons that had been transferred from the Death Valley-Mojave route was wrecked in a catastrophic crash on the Mule Canyon grade. 36 As related by writer Ruth Woodman: teamster Al Bagley's team "got away from him on a steep downgrade. There was a mad race, a tangle of mules and

Branstetter. Gertrude Alf asserted that Dolph Naveres also built the adobe bunkhouse, adjacent to Alf's Blacksmith Shop, and a few other adobe buildings in Daggett that are no longer standing in the early 1880s; "Longtime resident of Daggett remembers town's beginnings," *Desert Dispatch*, 25 March 1982.

<sup>&</sup>lt;sup>32</sup> Weight, 11-12.

<sup>&</sup>lt;sup>33</sup> Ted Faye, *The Twenty Mule Team of Death Valley* (Charleston, SC: Arcadia Publishing, 2012) 74.

<sup>&</sup>lt;sup>34</sup> Faye; 83, 125.

<sup>&</sup>lt;sup>35</sup> Information from docent; U.S. Borax Visitor Center, Boron, CA; 2 June 2023.

Teresa Terry, "Seymour Alf: railroad eating house proprietor, hotelier, blacksmith, freighter, even ice merchant," Daggett & Calico Historical Society newsletter, vol 2, issue 1, Jan 2017; supported by family lore.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

lines, a stream of colorful but futile oaths from the driver. The heavily loaded wagons overturned. Several animals were killed. Al himself was laid up for several weeks. It was the first and only trip he ever made for the [Pacific Coast Borax] company."<sup>37</sup> The Alf wagons built to replace and supplement the remaining set of Perry wagons were subsequently designed to avoid that fate.

Because it was primarily during the Borate period that the twenty mule team wagons were photographed, Alf wagons are well represented among the historical images available today. They are identifiable by some or all of the characteristics described above.

#### The Mules

Although called "twenty mule" team wagons, it is well known that a team typically consisted of eighteen mules and two horses; the two horses serving as Wheelers, nearest the wagon, where their greater weight and strength was needed to steer the wagon tongue.<sup>38</sup> Nevertheless, as needs must, teams would sometimes include more than the two Wheeler horses. Seymore Alf, particularly, is known for mixing mules and horses in his teams, and would sometimes even get by with only eighteen animals in a team. Based on newspaper reports of Alf's activities buying animals, and lack of evidence that he was involved in breeding mules, it appears that he stocked his herd with animals he purchased from breeders or traders in surrounding communities.<sup>39</sup> He maintained a herd of sixty to ninety animals, equivalent to three or four borax wagon teams, which is consistent with the requirements of the two to three sets of borax wagons he owned and operated. He probably kept additional animals to serve as backups or to lease out to other customers, such as prospectors and other mining and freight operations. The animals were kept in large corals behind (to the west of) Alf's Blacksmith Shop. As noted, Alf employed Charles Cortwright, who in addition to driving ore wagons was a skilled mule trainer.

Whatever the makeup or number of a long line team, it was a well-trained, obedient, and precise machine. Each animal knew its name and specific position on the team; be it a Leader, an Eighteen, a Sixteen (and so on down to the Sixes), a Pointer, or a Wheeler. The term "long line" was adopted because the mules were all linked by a single long "jerk line" and a single long heavy chain running from the front wagon axle, between the pairs of mules, to the lead singletree. The driver typically rode the left-hand Wheeler (nearest the wagon) and his only point of control was the jerk line that attached to the bridle of the left-hand Leader (or Line Mule), which was essentially the single mule that directed the entire team. A steady pull on the jerk line directed the Line Mule left, a quick jerk directed her right. Her direction was translated to the mule beside her by a "jockey stick" that spanned between her collar and her partner's bridle; pulling or pushing the partner's head one way or the other based on the Line Mule's path of travel. All the mules behind simply followed. The Twelves through the Eighteens were known as the Swing Team and provided power. The Sixes, the Eights, and the Pointers had the additional and very complex job of steering the wagon and keeping the chain clear of turns. They were trained to "jump the chain" when needed; the mule on the inside of the turn leaping over the center

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<sup>&</sup>lt;sup>37</sup> Faye, 82.

<sup>&</sup>lt;sup>38</sup> It is a widely perpetuated myth that two horses were included on the team because horses are smarter than mules; however, this is not true, with many muleskinners swearing to the opposite.

<sup>&</sup>lt;sup>39</sup> Desert Dispatch, 23 January 1914.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

chain to join its partner on the off side and pull obliquely to the front portion of the team. This kept the chain taught and pulled away from the turn, while continuing to provide power to move the wagon forward through a wide arc. Meanwhile, the Wheelers leaned on the wagon's axle tongue to change the direction of the front wagon wheels to make the turn. Starting and stopping relied entirely on the verbal commands of the driver (and sometimes tossed rocks) and, in the case of stopping, the wagon brakes. It was an impressive feat of coordination and communication between men and mules.<sup>40</sup>

## The Borate to Daggett Route

The trip between Borate and Daggett, as driven by Seymore Alf and his wagons, was only eleven or twelve miles, but was in some ways as treacherous as the 165 mile Death Valley-Mojave route had been. The round trip could be completed in three days; a day-and-a-half from the mine to Daggett, and a day-and-a-half return. The wagons were filled with loose ore at the mine using ore chutes. They likely departed in the morning and had a day-long, difficult, downhill trip out of the Calico hills. The route passed through Mule Canyon, which had an intimidating grade to overcome in either direction, and was the location of the one overnight stop on the route. About half-way between the mine and Daggett, it was known as Camp Rock and was a dry camp. The water tender wagons that were pulled behind the ore wagons were based at Camp Rock and were hauled into Daggett to be filled when needed, then left at the camp for the next team to come through. Mules were unhitched, fed, and corralled at the camp overnight, while the swamper was typically in charge of making and cleaning up meals for himself and the wagon driver.

Coming out of the hills the next day, the going was easier as the wagons crossed the empty flats of the Calico dry lake bed, forded the dry Mojave River bed, and pulled into Daggett from the east around mid-day. <sup>43</sup> The twenty mule teams and ore wagons made a wide turn and traveled directly west down the town's main street, which paralleled the rail tracks. The team and wagons would drive up an earthen ramp to an elevated berm beside the tracks and ore would be conveniently unloaded from the wagons into rail cars below. The team would then pull the empty wagons down the opposite ramp to level ground. In Daggett, the wagons would be loaded with supplies to go back to the mine and the water tender would be filled. The remainder of the day would be used retracing the route to Camp Rock for another overnight stop. On uphill climbs, when wagons were heavy with supplies, they were often unhitched and hauled one up at a time. <sup>44</sup> The wagons would arrive back in Borate the evening of the third day, after a slow uphill slog.

<sup>&</sup>lt;sup>40</sup> Weight, 16. Faye, 92.

<sup>&</sup>lt;sup>41</sup> Faye, 89.

<sup>&</sup>lt;sup>42</sup> Ibid., 87.

<sup>43</sup> The Pacific Coast Borax Company established a crushing and calcinating plant, known as Marion, on the northern edge of the Calico dry lake bed in 1898. (Keeling, 100.) Previously, during the period of twenty mule team operation that is described, unrefined ore had been taken directly to Daggett and shipped by rail to the company's refiner in Alameda, California. The establishment of Marion took place as the twenty mule team wagons were going out of service and being supplanted by the Borate-Daggett narrow-gauge railroad, but for a brief time, the wagons hauled ore from the Borate mine to Marion, while the railroad took it the rest of the way, from Marion to Dagget.

<sup>&</sup>lt;sup>44</sup> Faye., 85.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

The iconic imagery and the legends that surround the twenty mule team wagons might lead one to believe that large fleets of such wagons criss-crossed the Mojave Desert for decades. In reality, only about seven or eight sets of the wagons ever existed, not all at the same time, and they operated for only about twelve years, total. The first five sets of wagons were designed by J.W.S. Perry and built to serve the Death Valley borax mines from 1884-1888. Three of these sets were divested of when the Pacific Coast Borax Company moved mining operations to Borate, then one of the two remaining sets was lost in a wreck. Alf's Blacksmith Shop was enlisted to build two or three more sets, so that during the Borate period (1890-1898), four sets operated; one built by Perry, two or three by Alf. After twenty mule team hauling ended, one set of Alf wagons may have been sold off to actor Wallace Berry, who stared in the 1940 western "Twenty Mule Team!" and apparently purchased a set of wagons from the Alf family to use in promotion of the film. It is unclear where that set ended up, but it does not seem likely to have survived. There are currently two sets of wagons in Death Valley; one at the Harmony Borax Works site and one at Furnace Creek Ranch. A third set is on display at the visitor center of the U.S. Borax Rio Tinto mine in Boron, California. 45 Based on documentation and their physical characteristics, two of the three sets – those at Furnace Creek and Boron – are Alf wagons. This means that between photographic documentation of the era and the actual surviving wagons, most of the examples that the world recognizes as twenty mule team borax wagons today were built at Alf's Blacksmith Shop in Daggett.

# Infrastructure Building

While the association of Alf's Blacksmith Shop with the legendary twenty mule team wagons evokes the most enthusiastic recognition, its role as the headquarters for Seymour Alf's teaming operations and work constructing critical early infrastructure throughout the Mojave Desert region, is also significant. As early as 1888, Alf was appointed, by petition of local citizens, to the post of Road Overseer of the Belleville Road District. After continuing his ore wagon services for a time, he appears to have adopted road building as his primary occupation in the early twentieth century. Alf's Blacksmith Shop and corrals in Daggett conveniently supplied and maintained the equipment and animals required to grade and maintain local transportation routes and undertake a variety of earth-moving and excavation projects. Alf served as foreman and worked alongside crews of hired men, some of whom may have resided in the bunkhouse on the Alf property, just as smiths, borax wagon drivers, and swampers had before them.

Between 1906 and 1920, there are numerous newspaper notices, primarily in the *San Bernardino Sun*, reporting San Bernardino County's payments to Seymore Alf for road work, freighting, blacksmithing, and other jobs done under County contract. Local and regional newspapers regularly reported on road-building activities and Alf's involvement features prominently.

# Mining Equipment & Infrastructure

<sup>&</sup>lt;sup>45</sup> *The Twenty Mule Team of Death Valley*. Produced and directed by Ted Faye. 77 min. Gold Creek Films, 2002. DVD/YouTube.

<sup>&</sup>lt;sup>46</sup> San Bernardino Daily Courier, 8 May 1888.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

When local borax mining operations discontinued use of twenty mule team wagons just prior to the turn of the twentieth century, Alf's Blacksmith Shop continued building and maintaining other wagons and equipment, horseshoeing, and leasing of horses and mules. Additionally, Seymore Alf appears to have continued providing some of the same services he provided the Pacific Coast Borax Company to other mining operations. As evidenced by a newspaper mention in August 1898 – concurrent to the discontinuation of the twenty mule team wagons at Borate – Seymore Alf was reported to be in Needles, California, "pass[ing] through the city with 75 head of mules with which to haul ore from the Sheep Trail Mine to the mill on the river. Four 20-ton ore wagons also went up to the mine..." The Sheep Trail Mine, which yielded both gold and silver, was located across the state line from Needles. Thus, it appears that Alf provided mules and wagons to the Arizona & New England Company, owners of the Sheep Trail Mine, just as he had to the Pacific Coast Borax Company; even down to the massive freight wagons. Although unconfirmed, the stated number of animals, wagons, and the unusually large tonnage capacity of those wagons suggests that two sets of Alf's twenty mule team borax wagons had been put back into use.

In fact, Alf had not completely parted ways with his former client, the Pacific Coast Borax Company. In 1903, he sub-contracted with the firm to build a road that ran from the state line to Kessler Springs. It appears to have been a portion of a longer road, eight feet wide, designed to accommodate an electrogasoline traction engine that would serve Pacific Coast Borax's mining interests in Ash Meadows, Nevada. Alf employed forty teams of mules (most likely meaning teams of two, as typical for the operation of equipment like Fresno scrapers) to complete the work.<sup>48</sup>

By 1907, in addition to Alf's renewed borax hauling at the Lila C mine, it was reported that booming mining activity in the region was putting huge demands on rail lines such that Seymore Alf was employed in constructing a steam wagon road from Daggett to the Ord Mountain properties (about nineteen miles south of Daggett) to facilitate the movement of mining machinery. <sup>49</sup> He did some of that machinery hauling himself in 1912, when he was employed by the Lavic Mining & Milling Company to freight mining equipment to its mining claims forty miles south of Needles. <sup>50</sup>

#### Railroads & The Barstow Harvey House

In 1903, the Empire Construction Company hired Seymore Alf to "construct, build, and in every way respectfully complete all the grading, excavating, and filling required for a single track railroad with side tracks on what is known as the Daggett Branch of the San Pedro, Los Angeles, & Salt Lake Railroad, situated in San Bernardino County..." This rail line was a 6 ¼-mile segment running northeast from the Santa Fe Pacific Railroad in Daggett to Railway Survey Station "O."

<sup>&</sup>lt;sup>47</sup> "Mining Interests," Los Angeles Evening Express, 17 August 1898.

<sup>48 &</sup>quot;Road to Ash Meadows," Inyo Independent, 30 October 1903.

<sup>&</sup>lt;sup>49</sup> Pomona Progress, 24 January 1907. LA Times and San Bernardino County Sun, 25 Jan 1907.

<sup>&</sup>lt;sup>50</sup> Barstow Printer, 24 May 1912.

<sup>&</sup>lt;sup>51</sup> "Interesting Papers Reveal Story of Building Union Pacific Railroad Through Desert During 1900s," *Desert Dispatch*, 18 June 1953.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

This project established a new rail line and a new town. The "O" terminus would become a settlement called Otis that would eventually evolve into the town of Yermo, as it is known today. Alf's crews used Fresno scrapers pulled by mule teams to grade a road from Daggett to the dry Mojave River bed, then on to Otis, where they also graded the railroad's material yards. Initially, Otis was nothing but a material yard and tent city inhabited by railroad workers, but seeing potential for a permanent community, Seymore Alf built the town's first building in 1905; a general store and post office that was run by two of Alf's daughters, Emma and Mollie. After the general store and post office were established, the railroad built a permanent depot and roundhouse, ensuring Otis' future success. According to Walter Alf, who was 17 at the time of the Daggett to Station "O" branch line project, he assisted his father on this undertaking and they went on to work on subsequent projects together. <sup>52</sup>

When finished with the San Pedro, Los Angeles, & Salt Lake Railroad branch line project, Alf took another contract to grade a fifteen-mile road from a point on the California-Nevada line to a point near the town of Nipton, California. That project took about seven months to complete, lasting until May 1904.<sup>53</sup>

In 1910, Seymore Alf won an important contract with the Santa Fe Railroad to grade and complete site work for the new Casa del Desierto, better known as the Barstow Harvey House (NRHP listed 1975, California Historical Landmark #892, 1976) and associated rail yard.<sup>54</sup> This made construction of the famed railroad depot/hotel and restaurant possible a year later. The Alfs were also simultaneously employed by Santa Fe to excavate a storm water ditch a mile long to divert flood waters to the Mojave River bed and protect the rail lines running through the area.<sup>55</sup> The year 1910 also saw them working on other railroad grades around Barstow, as well as rail grading for the Salt Lake high line in Meadow Valley, Nevada.<sup>56</sup>

#### Automobile Roads

As private automobiles became a more prevalent form of transportation in the early twentieth century, the need for well-graded, smooth, and solid roads to drive on was critical. The first automobile was reported to have crossed the desert in 1903, but steep grades and deep sand made travel extremely difficult.<sup>57</sup> It took another eight years, but eventually the County of San Bernardino began to invest in road-building that would make travel through the Mojave Desert quicker, safer, and more comfortable for motorists. In fact, by 1914, automobile travel was the subject of such popular attention that the Los Angeles Auto Club organized a race from Los Angeles to Phoenix, Arizona to promote automobiles and encourage the development of safe roads. Called the Cactus Derby, the race (which had been started as an annual event in 1908) passed through the Mojave in November 1914. Only a few weeks

<sup>&</sup>lt;sup>52</sup> Ibid. "History of Yermo Quite Sketchy," Desert Dispatch, 4 October 1984.

<sup>53</sup> Ibid.

<sup>&</sup>lt;sup>54</sup> Barstow Printer, 5 August 1910.

<sup>55</sup> Desert Dispatch/Barstow Printer, 26 Aug 1910.

<sup>&</sup>lt;sup>56</sup> Desert Dispatch, 16 Sept 1910 and 28 October 1910. Barstow Printer, 28 October 1910 and 11 November 1910.

U.S. Department of the Interior, Bureau of Land Management. "Historic Route 66 Needles to Barstow Scenic Byway." The Bureau of Land Management. No Date. URL: https://www.blm.gov/california-historic-route-66-needles-barstow-scenic-byway.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

earlier Seymore Alf, with a gang of men and teams, had been out "putting the automobile highway into shape for the races." <sup>58</sup>

While Alf's most significant project was probably the major road crossing the desert from east to west, he also built smaller but no less useful roads branching from it. From the Barstow and Daggett area he built a road that accessed Lucerne Valley to the south, accessing the small communities and mining towns of Cushenbery, Doble, and Bear Lake, beyond (essentially today's Highway 247). <sup>59</sup> In the same area, from 1915 to 1917, he built all the roads up to and around Big Bear and Baldwin Lakes, including Johnston Grade and, likely, Cushenbery Grade (now part of State Route 18), which had steep six to ten percent grades. <sup>60</sup> Likewise, a forty-mile road from Daggett via Stoddard Wells (near Victorville) crossed "dry barren wilderness, with no settlers along the line. It [was] intended as a short cut for auto travelers from Needles to the mountain resorts and San Bernardino."

In addition to building long stretches of road, Alf was also responsible for individual projects that improved motoring in the Mojave. One was the 1912 relocation of the Daggett Garage from the Waterloo Mine to Santa Fe Street in Daggett. The garage had originally served as a locomotive repair roundhouse for the Borate & Daggett Railroad at Marion. Using a twenty mule team, Alf later moved it to the Waterloo Mine, southwest of Calico, where it served a similar purpose. After the closure of the Waterloo Mine, the building was moved – again by Alf – to Santa Fe Street in Daggett and became an automobile service and repair garage in 1912. <sup>62</sup> This was timely, as Alf was grading the National Old Trails Road through the town and passing motorists no doubt welcomed this automotive amenity. They probably also appreciated minor road improvements made by Alf, such as the improved intersection of the automobile road with the Salt Lake Railway tracks in Daggett, where the crossing was broadened and lengthened, making a long gentle incline instead of a short steep grade. <sup>63</sup>

#### Route 66

Alf's business was booming when the 11 August 1911 issue of the *Desert Dispatch* reported that he was in Tehachapi buying twenty head of horses, but that "his requirements called for more." He was most likely preparing for substantial contract work from the County of San Bernardino. He continued to work for the Santa Fe Railroad but also embarked on grading a road for automobiles that would be the first road for cars through the Mojave Desert. The road was initially christened the Old Trails Road in 1912, and later became the National Old Trails Highway. By 1918, it had become part of the transcontinental route from Los Angeles to New York and, in 1926, was known as U.S. Route 66.<sup>64</sup>

On 17 November 1911, the *Barstow Printer* reported under the headline "Dandy Desert Road," that:

For the past 6 weeks, Mr. Seymore Alf has been clearing the dust and the pebbles out of

<sup>&</sup>lt;sup>58</sup> Desert Dispatch, 30 October 1914.

<sup>59</sup> Desert Dispatch, 8 May 1914.

<sup>&</sup>lt;sup>60</sup> Keeling, 172.

<sup>61</sup> The Evening Index, 17 May 1914.

<sup>62</sup> E. Clampus Vitus and the Daggett & Calico Historical Society, "Daggett Garage" (plaque, marker No. 115), 2003.

<sup>63</sup> Desert Dispatch, 23 January 1914.

<sup>64</sup> Ibid.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

the wagon road from Daggett to Goffs – 130 miles. Teams were used to roll some of the pebbles out of the way. Dust was agitated with scrapers and the wind did the rest. Mr. Alf says anybody can follow that trail in the dark for 1,000 years – and not by tin cans strewn along it either. Man and beast can get water all along this road and supplies also. Of course the accommodations are not equal to the de luxe train, but an auto or wagon can follow the road by watching the smoke and dust of the train. Road Overseer Alf has certainly made this long desert road better. Perhaps the State Road Commission may adopt this road as part of the \$18,000,000 plan now under consideration.

Six days later, the *San Bernardino Sun* added that the road from Daggett to Goffs "goes through what is considered one of the roughest desert sections, travel being very difficult, owing to immense boulders which would roll down from the mountains, fairly littering the roadway. Alf has been for weeks removing these by means of four-horse teams, blasting those too immense for removal by horse power. The article gave Seymore Alf the moniker "pioneer road master of the desert country."<sup>65</sup>

Ultimately, Alf was responsible for grading almost the entire roadbed between Barstow and Needles. Working in sections, in April 1913 he had a large outfit laboring on the road east from Ludlow, while five months later he had started work on segments from Daggett heading east; "straightening them and putting them in good condition for automobiles... this is one link in the good roads from Los Angeles to the Grand Canyon." In December 1913, it was noted that the current travel time from Barstow to Needles was twelve hours and comfortable, which had decreased from two days thanks to road improvements. A little later, going into 1914, Alf had started grading the road from Daggett to Cadiz (near Amboy). Not only did the road-building require leveling the terrain and creating a driveable surface, but Alf's crews also dug wells to supply themselves and their horses and mules with water. These wells sometimes served or were the impetus for the establishment of small settlements, such as Mojave Water Camp, which offered a tiny wayside to travelers, including water and a gas station. By 1916, the *San Bernardino Sun* reported that the Barstow-Ludlow Road had "practically all been graded and made satisfactory for desert travel." Seymore Alf, foreman at Daggett, had got out his grader and gone over the road at least twice, going east and west from Daggett.

The road was initially simply dirt, often scarred by regular travel and desert flood waters, which necessitated repeated re-grading and maintenance. By the late 1920s, it had been "paved" through a newly-devised oiling process, but was not paved with asphalt until 1938.70 During the 1930s, Route 66 was periodically realigned in numerous places, bridges were built along the route to cross washes, and today, Highway 40 (built in 1957) cuts its own route along the same general alignment. The National Old Trails Road, as Seymore Alf built it, remains and is traceable, although it consists of diversions from the modern highway and includes some sections of disconnected "ghost roads." Nevertheless, it

<sup>65 &</sup>quot;Desert Road is Now Newly Built," San Bernardino Sun, 22 November 1911.

<sup>66</sup> Barstow Printer, 26 September 1913.

<sup>&</sup>lt;sup>67</sup> "Talks before he knows," *The Needles' Eye*, " 6 Dec. 1913.

<sup>68</sup> Desert Dispatch, 1 Dec 1949.

<sup>&</sup>lt;sup>69</sup> San Bernardino Sun, 8 April 1916.

<sup>&</sup>lt;sup>70</sup> "National Old Trails Road," Wikipedia. 23 January 2023. URL: https://en.wikipedia.org/wiki/National Old Trails Road.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

was the first feasible path for automobile travel across the Mojave Desert, evolved into a segment of the iconic Route 66, and blazed a path for the modern highway system that speeds us in comfort across the desert today.

Alf's Blacksmith Shop was an important and long-standing business in Daggett, California. In addition to the critical services it supplied to the pre-automobile town, the property was the location where iconic twenty mule team wagons were built for the Pacific Coast Borax Company during the Borate and Lila C periods of borax mining, where the mule teams were corralled, and where borax wagon drivers and swampers were housed. Later, it was the headquarters for infrastructure building activities that opened up much of San Bernardino County and Southern California to a variety of modes of transportation and successive growth and development of the region, even playing a part in the vast national context of Route 66. Therefore, Alf's Blacksmith Shop is significant under Criterion A.

#### **CRITERION B: PERSON**

Alf's Blacksmith Shop is significant under Criterion B for its associations with, and as the most notable representation of, the work of prominent local entrepreneur and businessman, Seymore Alf. Alf was involved in numerous local business ventures, foremost among them Alf's Blacksmith Shop.

Alf's Blacksmith Shop is eligible in the Area of Significance of Commerce – the business of trading goods, services, and commodities – because it functioned as a place of specialty business, as described under Criterion A, that contributed directly to local and regional commerce and economy and facilitated commercial and economic activities on a regional and national scale. In relation to Criterion B, the business of Alf's Blacksmith Shop was directly linked to the ownership and operational management of Seymore Alf. Alf had a demonstrated record of participating in many local business ventures; like way-station operation, wheat farming, butchering, grubsteaking and mining activities, operating a railroad hotel, producing and selling ice at the Calico mines, owning stock in the local water company, real estate investment, saloon ownership, and operating a general store and post office. Specifically related to Alf's Blacksmith Shop, Seymore Alf conducted commerce in the areas of blacksmith shop ownership, freighting and mule skinning, grading roads and rail lines, and building and maintaining freight wagons and other heavy equipment. He was not a blacksmith himself, but owned the blacksmith shop business (including the actual smithing and wagon building activities of the shop, but also the leasing of wagons and mule teams); conducted business with customers, including the Pacific Coast Borax Company and the County of San Bernardino; and was the employer of smiths, wagon builders, and teamsters who worked in or were based at the shop. Alf more directly participated in related wagon driving, mule skinning, and road grading activities, thus investing his own physical skills in the operation of his business. Ultimately, he was an entrepreneur that not only established and conducted many businesses that served the town of Daggett and the local area, but established and operated the blacksmith shop, which was critical in facilitating local and regional industry like borax mining and infrastructure building that had regional and national influences. Seymore Alf's business activities were wide-ranging, but Alf's Blacksmith Shop is the best physical representation of his commercial activities.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

The blacksmith shop is also eligible in the Area of Significance of Industry – the technology and process of managing materials, labor, and equipment to produce goods and services – because it was a manufacturing facility for vehicles and equipment that illustrates the materials used and products manufactured, the tools and technology utilized, and the activities of workers within the shop. In relation to Criterion B, the industrial activities demonstrated by Alf's Blacksmith Shop are linked to historically significant person, Seymore Alf, in that Alf owned and managed the shop, provided the materials and equipment needed to conduct blacksmithing work, and employed the workers. Although he was not a blacksmith or wagon builder, himself, he understood the technologies and processes involved in order to effectively manage the materials, labor, equipment, and activities that he based his business on. He was more directly involved with the activities of the business that took place outside of, but were supported by, the shop, such as wagon driving, mule skinning, and road building. In that way, he was personally invested in the labor and services provided by his blacksmith shop, demonstrating that he was invested in both the management of and physical activities of his industrial facility.

#### Seymore Sylvester Alf (1849-1922)

Seymore Sylvester Alf was born in Wurttemberg, Germany in 1849 and immigrated to the United States with his family at the age of five. His father and sister died on the Atlantic crossing and, with only his mother, Walburge Alf, he landed in New York. They settled somewhere in the United States and Alf is absent from records until 1874, when at age 25, he reappears in Jasper County, Iowa. There he married Mathilda Bender, also a native of Germany. The couple had two children and tried their hand at farming in Iowa, before heading west by wagon via Colorado, where they had another child in 1879.<sup>71</sup>

Likely traveling the well-established Spanish Trail to the Southern California desert, the Alf family eventually arrived in California in 1881.<sup>72</sup> Although their intended destination was San Bernardino, they did not find the insular Mormon community there welcoming and changed course, backtracked northward along the Mojave River, and briefly settled in Oro Grande. The 1882 California Voter Register lists Seymore Alf as a farmer in Oro Grande and a fourth child was born there that year.<sup>73</sup>

By 1884, the Alf family, still following the Mojave River north and east, had relocated to Fish Ponds, southeast of Barstow. There, Seymore Alf bought a property known as Fish Ponds Station, which served desert travelers with supplies, equipment repairs, and basic hospitality. Providing such services was a precursor to Seymore's later pursuits as a hotel proprietor and blacksmith shop owner. He may also have grown hay for market, as prior owners of the property had done, and he employed himself in the butchering trade; providing meat to feed the miners in nearby Calico and other mining settlements.

The non-contributing third wagon located in the wagon shelter on the property is that which carried the Alf family to California ca. 1878-1881.

<sup>&</sup>lt;sup>72</sup> Keeling, 172.

<sup>&</sup>lt;sup>73</sup> Teresa Terry and Caitlin Harvey (Hibma). "The Stone Hotel Restoration Project: Historic Structure Report." March 2017.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

Most importantly, he entered into what would become his prime occupation over the years, that of teamster; hauling freight to and from San Bernardino.<sup>74</sup>

Alf's entrepreneurial tendencies compelled him to become involved in a variety of local businesses and civic organizations; eventually encompassing grubsteaking and mining activities, serving as a desert guide and posse member, <sup>75</sup> operating a railroad hotel, producing and selling ice at the Calico mines, owning stock in the local water company, serving on the local school board, real estate investment, saloon ownership, blacksmith shop ownership, freighting and mule skinning, grading roads and rail lines, operating a general store and post office in Yermo (that town's first business), and building and maintaining freight wagons and other heavy equipment. <sup>76</sup>

In the spring of 1885, business opportunities lead Seymore Alf to relocate his family to Daggett. There, entering into a business partnership with Robert Sparks, he purchased the Stone Hotel (California Point of Historical Interest #658, 1985; NRHP designation pending, 2023). The hotel, located along the newly-built Southern Pacific Railroad line that ran through Daggett, was constructed in 1883 as the Railroad Hotel & Eating House that served as a layover and meal stop for train passengers. Of the two partners, Alf appears to have taken the lead in running the hotel. It was commonly known at the time as Alf's Railroad Eating House and city and county directories, as well as newspaper advertisements, name both Seymore and Mathilda Alf as proprietors. Oral history of the Alf family indicates that the Alfs lived in the hotel during the time Seymore Alf owned the property. However, that ownership was short lived. In late 1886, the Southern Pacific Railroad relocated its terminus from Daggett to Barstow. A subsequent decrease in business likely prompted Alf and Sparks to sell the hotel that same year. 77

Having left both a business and home at the Stone Hotel, the Alf family squatted on Santa Fe railroad-owned land at 1<sup>st</sup> and Santa Fe streets in Daggett. Eventually, the railroad company undertook a survey that confirmed its ownership and subsequently divested of some surplus land. The Alfs purchased the property, which was a little over two acres and included a pre-existing two-room adobe house that they may have been living in at the time. <sup>78</sup> Alf moved a small one-room cottage – the family's former residence at Fish Ponds – to the Daggett home site and built another room onto it (now addressed 33640 1<sup>st</sup> Street) and the adobe house (now addressed 33652 1<sup>st</sup> Street) became a bunkhouse for the teamsters, smiths, and other men that Alf employed. <sup>79</sup>

Thus, in 1886, having quit his pursuits as a hotel proprietor and secured property in Daggett on which to settle his family, Seymore Alf fully embarked on the business venture that would establish his blacksmith shop, teaming and freighting business, and his reputation as the "pioneer road master of the

<sup>&</sup>lt;sup>74</sup> Keeling, 172.

Alf was reported to have been a guide and posse member in the pursuit of Death Valley Scotty's fraudulent ambushers after the Battle of Wingate Pass. "First Twenty Mule Team Driver in Death Valley is Dead in Los Angeles," *San Bernardino Sun*, 17 March 1922.

<sup>&</sup>lt;sup>76</sup> Terry and Hibma.

<sup>77</sup> Ibid

<sup>&</sup>lt;sup>78</sup> Keeling, 172, "Alf's Blacksmith Shop Puts History and Daggett on display," San Bernardino Sun, 3 Oct 1974.

This bunkhouse is the non-contributing bunkhouse building still located on the property to the south of Alf's Blacksmith Shop. "Pioneer Daggett Home Nearly 100 Years Old," *Barstow Desert Dispatch*, 6 May 1971.

United States Department of the Interior National Park Service / National Register of Historic Places Registration Form OMB Control No. 1024-0018 NPS Form 10-900

Alf's Blacksmith Shop Name of Property

San Bernardino County, California County and State

desert country."80 It was reported in the Los Angeles Herald that, in 1886, he supplied a pair of silver prospectors with a team of mules or horses to reconnoiter and stake a claim south of Death Valley. 81 This was the first recorded instance when Alf acted as a livery proprietor, hiring out horses. Around the same time, and likely in conjunction with that activity, he established his blacksmith shop.

As related under Criterion A, Seymore Alf established his blacksmithing business by 1886 and found success, despite the shop having burned and been rebuilt in 1890. In addition to providing support to freight hauling operations throughout the desert region, the shop was a critical service business for locals and travelers; offering vehicle and equipment construction, maintenance, and repair, as well as the leasing of teams and the maintenance (shoeing primarily) of others' animals.

Seymore Alf, himself, was not a blacksmith, but employed local smiths, farriers, and carpenters. When he entered into contract to supply the Pacific Coast Borax Company with ore wagons and twenty mule teams, and eventually build additional wagons too, he also employed wagon drivers and swampers to work alongside him as he drove wagons to and from the Borate mines. Many of these men were probably provided with room and board at the bunkhouse on the Alfs' property.

In regard to his dealings with the Pacific Coast Borax Company, Alf appears to have had the foresight to have had ore wagons in readiness or near readiness for the commencement of mining operations at nearby Borate in 1890. Francis Marion Smith having prematurely disposed of most of his fleet of twenty mule team wagons was in need of more and Seymore Alf quickly cornered the market, bringing the lucrative wagon building and hauling contract to his blacksmith shop and the community of Daggett. In so doing, his shop even improved on the original design of J.W.S. Perry's borax wagons, customizing them to overcome the particular difficulties of the Borate to Daggett route and ensuring safer and more efficient transport of ore for the Pacific Coast Borax Company and his own employees.<sup>82</sup> Although Smith made attempts, and eventually succeeded, in dispensing with the twenty mule team wagons as his preferred method of transporting ore, Alf's vehicles, teams, and services were obviously respected and valued and, when needed, readily called back into service to help built a traction engine road for Pacific Coast Borax's mines at Ash Meadows in 1903 and haul borax at the Lila C mine in 1907.

As the nineteenth century came to a close and the twentieth century opened, Seymore Alf encountered many challenges to his business, not least of which was the phasing out of the twenty mule team wagons. Around the same time, mining operations in the Daggett area – both borax and silver – began to wane, meaning less demand for the construction and maintenance of other types of ore wagons and mining equipment. A little later, the introduction of automobiles put additional pressures on the industry of building and maintaining horse-drawn vehicles and leasing teams. Nevertheless, Seymore Alf kept his business going and deftly evolved the main activities of his blacksmith shop toward the

<sup>80 &</sup>quot;Desert Road is Now Newly Built," San Bernardino Sun, 22 November 1911.

<sup>81</sup> Los Angeles Herald, 4 March 1886.

<sup>82</sup> It seems likely that design of Alf's Borate wagons may have had the input of Perry, himself, who continued to live in Yermo and be involved with Pacific Coast Borax Co., and/or blacksmith Bill Borham, who had been involved with the building of the earlier Death Valley wagons and worked at Borate and the Alf Blacksmith Shop.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

building of local infrastructure, which continued to rely on the things Alf specialized in; mules and mule-drawn equipment, such as heavy wagons and Fresno scrapers. While Alf's Blacksmith Shop played a somewhat less visible role in the building of roads, railroads, irrigation ditches, wells, and other infrastructure in vast San Bernardino County, it continued to serve as the headquarters for Seymore Alf's business and functioned much as it had in earlier years; fabricating, maintaining, and repairing vehicles and equipment, housing and dispatching teams to project locations, even providing housing to Alf's employees.

When Seymore Alf died in 1922, he was lauded with an obituary printed front and center in the local section of the *San Bernardino Sun* and headlined "First Twenty Mule Team Driver in Death Valley is Dead in Los Angeles." Like so much about Death Valley and the twenty mule teams, hyperbolic myth and perpetuated tales got a few details wrong; however, the portrayal of Seymore Alf as "the last of the 'old guard' of the Mojave Desert," and "one of the best known men of the Mojave region" appears apt. The obituary goes on to laud his "authority on water holes and roads," his "active part in the construction work on the building of the Salt Lake route from Daggett to the caves [Afton Canyon]... and in the building of the Tonopah & Tidewater," and his service as a desert guide and posse member, as well as his work as a driver of borax wagons and silver freighters. <sup>83</sup>

Alf's Blacksmith Shop is the best representation of Seymore Alf's importance as an early influential citizen of Daggett and San Bernardino County, a local entrepreneur, a facilitator of borax mining activities especially in relation to the twenty mule team wagons, and a builder of early regional infrastructure. Alf's Blacksmith Shop was the headquarters of all of Seymore Alf's activities in wagon-building, livery and farrying services, teaming, and road-building. Therefore, Alf's Blacksmith Shop is significant under Criterion B.

# Integrity

Alf's Blacksmith Shop retains integrity of location and setting, having never been moved from its historical location and maintaining its original orientation to 1<sup>st</sup> Street, the utility yard, the bunkhouse, associated equipment and vehicles, and other auxiliary structures around it. It retains integrity of materials, design, and workmanship, being essentially unaltered from the time of its construction (1890), retaining its wood-based structure, original plan, and many features (including original tools and equipment) that indicate its use and function. It, therefore, retains integrity of feeling as a latenineteenth and early-twentieth century blacksmith shop, and integrity of association with the blacksmithing, wagon-building, and equipment maintenance activities that took place there and which had significant contributions to history.

<sup>83 &</sup>quot;First Twenty Mule Team Driver in Death Valley is Dead in Los Angeles," San Bernardino Sun, 17 March 1922.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

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<u>Alf's</u>	Blacks	smith	Shop

San Bernardino County, California County and State

Name of Property

The Needles' Eye (Needles, CA.), 1913.

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Terry, Theresa. "Seymour Alf: railroad eating house proprietor, hotelier, blacksmith, freighter, even ice merchant," *Daggett & Calico Historical Society Newsletter*, vol 2, issue 1, Jan 2017.

and Caitlin Harvey (Hibma). "The Stone Hotel Restoration Project: Historic Structure Report." March 2017.

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Weight, Harold O. 20 Mule Team Days in Death Valley. Twenty-Nine Palms, CA: The Calico Press, 1955.

S Blacksmith Shop ne of Property	San Bernardino County, Californ County and State
Previous documentation on file (NP	PS):
preliminary determination of incompreviously listed in the National previously determined eligible be designated a National Historic Legrecorded by Historic American I recorded by Historic American I	by the National Register  Landmark  Buildings Survey #  Engineering Record #
Primary location of additional data	:
State Historic Preservation Office	ce
Other State agency	
Federal agency	
Local government	
University	
Other	
Name of repository:	

A10 D1 1 '41 C1

AIT'S Blacksmith Snop	San Bernardino County, California
Name of Property	County and State
10. Geographical Data	
Acreage of Property 0.789	
Use either the UTM system or latitude/longitu	ude coordinates
Latitude/Longitude Coordinates	
Datum if other than WGS84:	
(enter coordinates to 6 decimal places)	

Verbal Boundary Description (Describe the boundaries of the property.)

The boundaries of the property are those which bound San Bernardino County Assessor's parcel number 0516-20-11-1. According to the Assessor the boundaries measure 986.172 feet and contain 0.789 acres. The parcel is generally rectangular, with a long narrow access strip extending south to Santa Fe Street.

The boundaries start at a point on the west side of 1<sup>st</sup> Street in Daggett, California, 343 feet north of Santa Fe Street. From that point they run south 197 feet, west 78 feet, south 146 feet, west 10 feet, north 146 feet, west 61.5 feet, north 343 feet, and east 149.5 feet to the point of beginning.

**Boundary Justification** (Explain why the boundaries were selected.)

The boundaries are comprised of the extent of the legal parcel on which Alf's Blacksmith Shop is located and include the three other structures that contribute to the property's significance, as well as the utility/equipment yard that served Alf's Blacksmith Shop. Some non-contributing buildings and structures are also present within the boundaries. The original 2-acre property owned and used by the Alf family exceeds the nominated boundaries, but consists of other legal parcels that do not include buildings or structures directly related to the significance of Alf's Blacksmith Shop.

11. Form Prepared By				
name/title:Caitlin Hibma, Architectural H	istorian			
organization: Daggett & Calico Historical Society				
street & number: P.O. Box 105				
city or town: Daggett	state:	CA	zip code: 92327	
e-mail: caitlin@leftcoastarchitecturalhistor	y.com			
telephone:(415) 745-1906	•			
date: 13 September 2024				

Alf's Blac	ksmith	Shop	
Name of Pro	pertv		

San Bernardino County, California	
County and State	

#### Additional Documentation

Submit the following items with the completed form:

- Maps: A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- Additional items: (Check with the SHPO, TPO, or FPO for any additional items.)

**Paperwork Reduction Act Statement:** This information is being collected for nominations to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.). We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number. **Estimated Burden Statement:** Public reporting burden for each response using this form is estimated to be between the Tier 1 and Tier 4 levels with the estimate of the time for each tier as follows:

Tier 1 – 60-100 hours Tier 2 – 120 hours Tier 3 – 230 hours Tier 4 – 280 hours

The above estimates include time for reviewing instructions, gathering and maintaining data, and preparing and transmitting nominations. Send comments regarding these estimates or any other aspect of the requirement(s) to the Service Information Collection Clearance Officer, National Park Service, 1201 Oakridge Drive Fort Collins, CO 80525.

Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

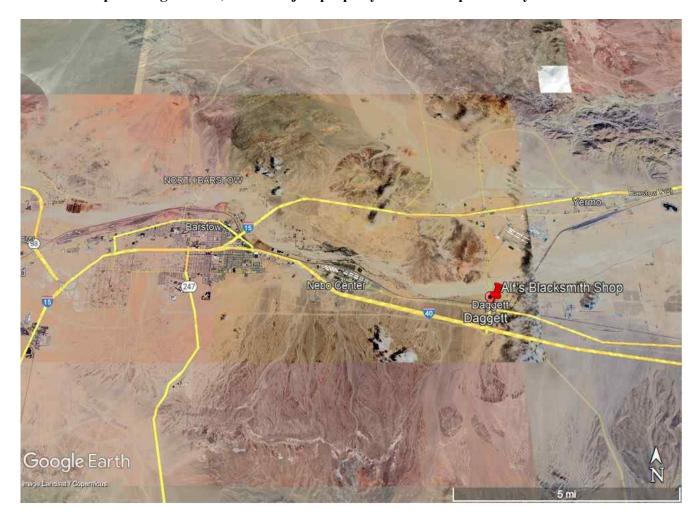
# Location Map 1: Google Earth, 2023. Subject property labeled. Map edited by author.



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

# Location Map 2: Google Earth, 2023. Subject property labeled. Map edited by author.

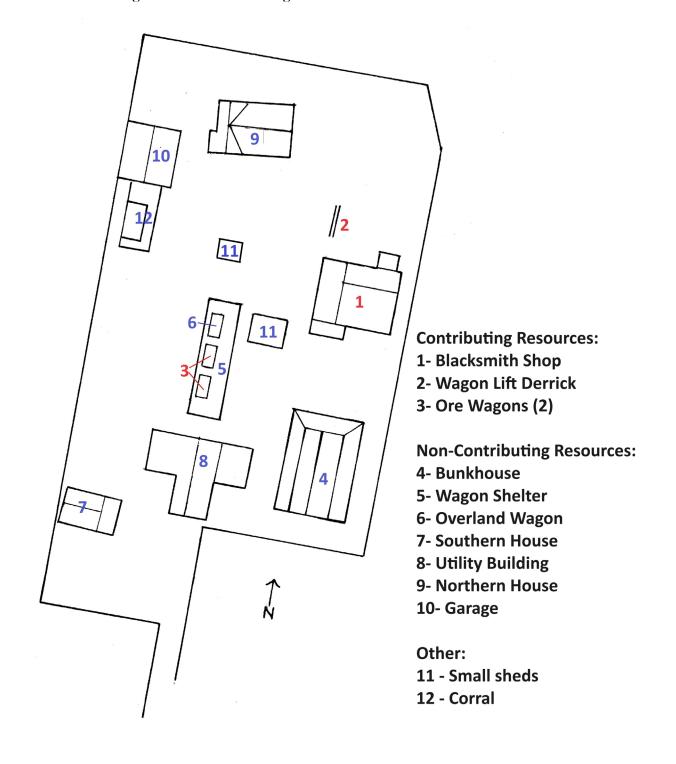


Alf's Blacksmith Shop

Name of Property

San Bernardino County, California
County and State

# **Site Plan: Contributing and Non-Contributing Resources**

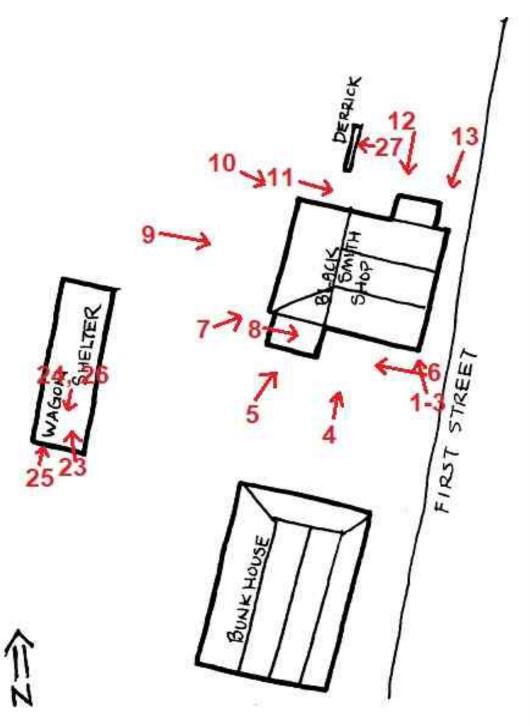


Alf's Blacksmith Shop

Name of Property

San Bernardino County, California County and State

Photo Key Map: Site

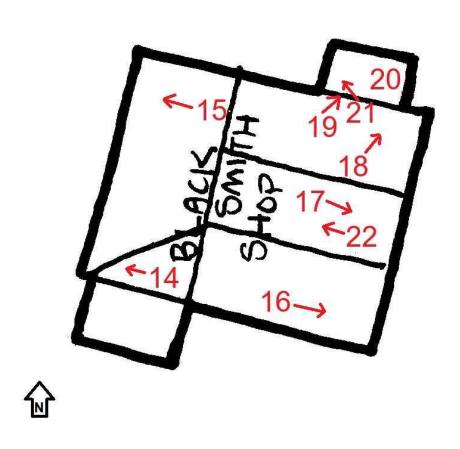


Alf's Blacksmith Shop

Name of Property

San Bernardino County, California County and State

# **Photo Key Map: Interior**



Alf's Blacksmith Shop

Name of Property

San Bernardino County, California
County and State

# **Photographs**

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

# **Photo Log**

### Current Photos

Name of Property: Alf's Blacksmith Shop

City or Vicinity: Daggett

County: San Bernardino State: California

Photographer: Caitlin Hibma

Date Photographed: 31 May 2023, 7 September 2024

Description of Photograph(s) and number, include description of view indicating direction of camera:

#### Photo 1 of 38

Alf's Blacksmith Shop, looking northwest at south and east (primary) facades.

#### Photo 2 of 38

Alf's Blacksmith Shop, looking northwest at east (primary) facade.

#### Photo 3 of 38

Alf's Blacksmith Shop, looking northwest, detail of gable end on east (primary) facade.

#### Photo 4 of 38

Alf's Blacksmith Shop, looking north at south facade.

# Photo 5 of 38

Alf's Blacksmith Shop, looking northeast at south facade.

#### Photo 6 of 38

Alf's Blacksmith Shop, looking west along south facade.

#### Photo 7 of 38

Alf's Blacksmith Shop, looking northeast at west facade, southwest corner, and south facade, including open storage area.

#### Photo 8 of 38

Alf's Blacksmith Shop, east along south facade from within open storage area.

## Alf's Blacksmith Shop

Name of Property

San Bernardino County, California

County and State

# Photo 9 of 38

Alf's Blacksmith Shop, looking east at west facade.

#### **Photo 10 of 38**

Alf's Blacksmith Shop, looking southeast at north and west facades.

#### **Photo 11 of 38**

Alf's Blacksmith Shop, looking east along north facade.

#### Photo 12 of 38

Alf's Blacksmith Shop, looking south at north facade.

#### **Photo 13 of 38**

Alf's Blacksmith Shop, looking southwest at east (primary) and north facades.

#### **Photo 14 of 38**

Alf's Blacksmith Shop, interior, looking west at workbench, etc. in southwest corner.

#### **Photo 15 of 38**

Alf's Blacksmith Shop, interior, looking west at northwest corner.

## **Photo 16 of 38**

Alf's Blacksmith Shop, interior, looking east at farrying area in southeast corner.

# **Photo 17 of 38**

Alf's Blacksmith Shop, interior, looking east at main doors on east wall. Crane, tire, and tire bending equipment in foreground.

## **Photo 18 of 38**

Alf's Blacksmith Shop, interior, looking northeast at forge in northeast corner.

# **Photo 19 of 38**

Alf's Blacksmith Shop, interior, looking northeast into bellows room at northeast corner.

## Photo 20 of 38

Alf's Blacksmith Shop, interior, detail of bellows in bellows room at northeast corner.

# **Photo 21 of 38**

Alf's Blacksmith Shop, interior, looking northwest into bellows room, detail of blacksmithing tools.

#### **Photo 22 of 38**

Alf's Blacksmith Shop, interior, looking west and upward at roof structure.

### Alf's Blacksmith Shop

Name of Property

San Bernardino County, California
County and State

# Photo 23 of 38

Alf's Blacksmith Shop contributing ore wagons, looking northwest inside non-contributing wagon shelter.

## Photo 24 of 38

Alf's Blacksmith Shop contributing ore wagons, looking southwest at side and rear of ore wagon.

#### Photo 25 of 38

Alf's Blacksmith Shop contributing ore wagons, looking north at front of ore wagon.

## Photo 26 of 38

Alf's Blacksmith Shop contributing ore wagons, detail of interior of ore wagon.

#### **Photo 27 of 38**

Alf's Blacksmith Shop contributing wagon lift derrick located to immediate north of shop, looking west.

#### **Photo 28 of 38**

Non-contributing bunkhouse, looking southwest at primary (east) and north facades.

#### Photo 29 of 38

Non-contributing bunkhouse, looking northeast at rear (west) and south facades.

#### **Photo 30 of 38**

Non-contributing wagon shelter, looking northwest at south end of structure.

## **Photo 31 of 38**

Non-contributing wagon shelter, looking southwest at north end of structure.

#### **Photo 32 of 38**

Non-contributing overland wagon, looking northwest.

#### Photo 33 of 38

Non-contributing southern house, looking west.

# **Photo 34 of 38**

Non-contributing utility building, looking southwest.

#### Photo 35 of 38

Non-contributing northern house, looking northwest.

#### **Photo 36 of 38**

Non-contributing garage, looking northwest.

### **Photo 37 of 38**

Contextual view looking northwest along 1st Street; subject property at left.

## Alf's Blacksmith Shop

Name of Property

San Bernardino County, California
County and State

#### **Photo 38 of 38**

Contextual view looking south down 1st Street; subject property at right.

### Historic Photos

# Figure 1

Seymour Alf (left) and Al Mudgett (right) in front of Alf's Blacksmith Shop, 1894. (Walters S. Alf Photograph Collection)

# Figure 2

Alf borax wagon and twenty mule team descending from Borate mines, 1894. (Alf-Herris Photograph Collection)

# Figure 3

Alf borax wagon, no date. (Alf-Herris Photograph Collection)

# Figure 4

Borax wagons in Daggett, no date (post 1890). A caption by Walter Alf on the back of the photo reads "These two wagons were built in our blacksmith shop for Borax Co. to their specifications and used on many trips to Borate Canyon with Alf teams." (Walter S. Alf Photograph Collection)

### Figure 5

Blacksmith Bill Boreham (center) and Daggett locals in front of Alf's Blacksmith Shop, 1906. (Walter S. Alf Photograph Collection)

# Figure 6

Blacksmith Bill Boreham in front of Alf's Blacksmith Shop, ca. 1906. (Source unknown)

#### Figure 7

Mule corrals on western side of property. Alf's Blacksmith Shop visible at left, ca. 1911. (Alf-Herris Photograph Collection)

#### Figure 8

Alf borax wagon in front of Alf's Blacksmith Shop, ca. 1928. (Alf-Herris Photograph Collection)

### Figure 9

Walter Alf in front of Alf's Blacksmith Shop, 1960. (Walter S. Alf Photograph Collection)

# Figure 10

Walter Alf bending a tire inside Alf's Blacksmith Shop, 1960. (Walter S. Alf Photograph Collection)

# Alf's Blacksmith Shop

Name of Property

San Bernardino County, California
County and State

# Figure 11

Alf ore wagon (contributing resource) in the utility yard outside Alf's Blacksmith Shop, ca. 1960. (Walter S. Alf Photograph Collection)

# Figure 12

Wagon lift derrick and ore wagon (contributing resources) in the utility yard outside Alf's Blacksmith Shop, 1964. (Walter S. Alf Photograph Collection)

## Figure 13

Alf's Blacksmith Shop, 1965. (Walter S. Alf Photograph Collection)

### Figure 14

Exterior southwest corner of Alf's Blacksmith Shop, 1965. (Walter S. Alf Photograph Collection)

# Figure 15

Carl Cambridge of Apple Valley Indian Museum in Alf's Blacksmith Shop, ca. 1965. (Walter S. Alf Photograph Collection)

# Figure 16

Alf's Blacksmith Shop, 1968. (Walter S. Alf Photograph Collection)

# Figure 17

Alf's Blacksmith Shop, ca. 1970. (John M. Swisher, *Images of America: The Mojave Desert* (Charleston, SC: Arcadia Publishing, 1999))

#### Figure 18

Alf's Blacksmith Shop in snow, ca. 1970. (Walter S. Alf Photograph Collection)

# Figure 19

Alf's Blacksmith Shop, 1971. (Walter S. Alf Photograph Collection)

#### Figure 20

Seymore Sylvester Alf, blacksmith shop proprietor, no date. (Alf-Herris Photograph Collection)

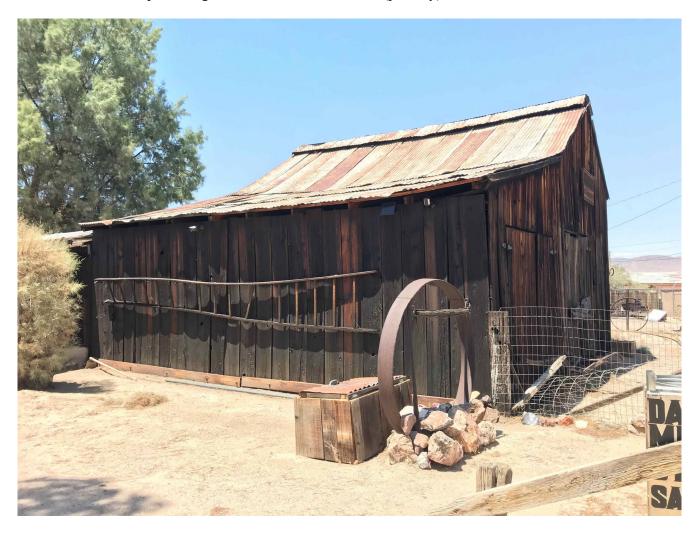
Alf's Blacksmith Shop Name of Property

San Bernardino County, California County and State

# **Current Photos**

# Photo 1 of 38

Alf's Blacksmith Shop, looking northwest at south and east (primary) facades.

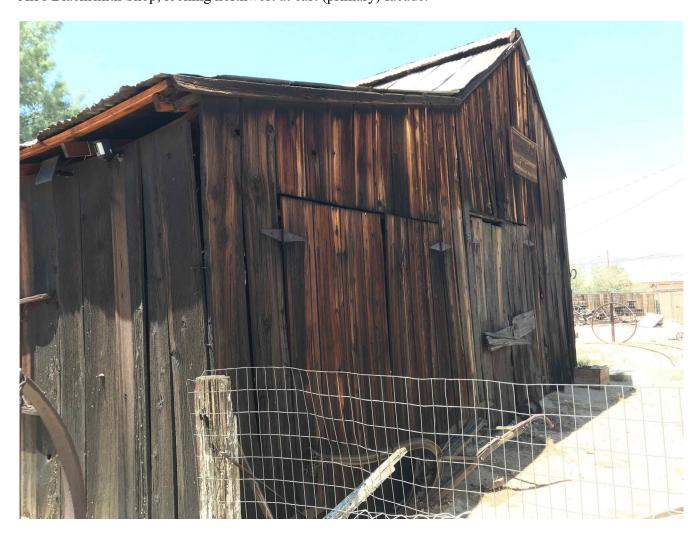


Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# Photo 2 of 38 Alf's Blacksmith Shop, looking northwest at east (primary) facade.

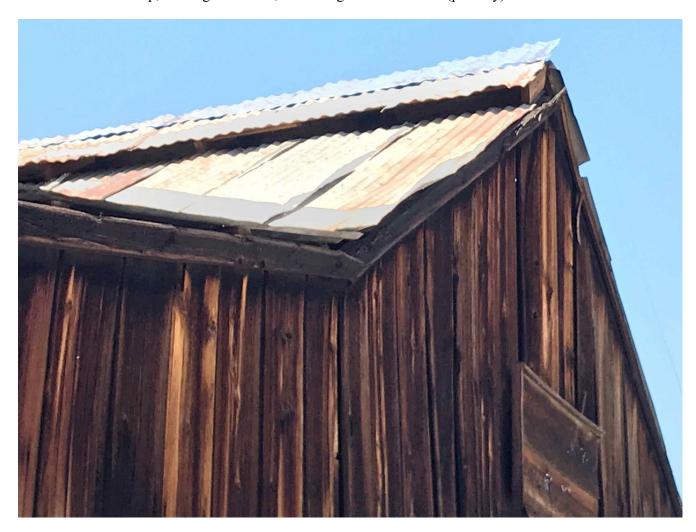


Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

# Photo 3 of 38

Alf's Blacksmith Shop, looking northwest, detail of gable end on east (primary) facade.



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

. ,

Photo 4 of 38 Alf's Blacksmith Shop, looking north at south facade.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

Photo 5 of 38 Alf's Blacksmith Shop, looking northeast at south facade.

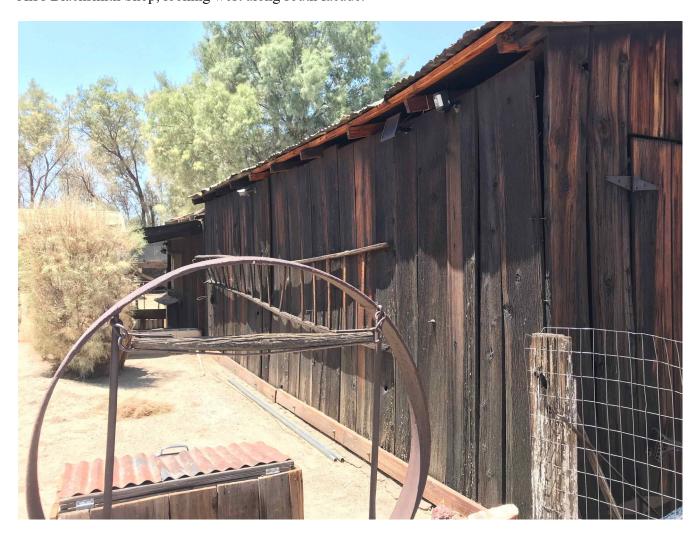


Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# Photo 6 of 38 Alf's Blacksmith Shop, looking west along south facade.



Alf's Blacksmith Shop

Name of Property

San Bernardino County, California
County and State

# Photo 7 of 38

Alf's Blacksmith Shop, looking northeast at west facade, southwest corner, and south facade, including open storage area.



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

# Photo 8 of 38

Alf's Blacksmith Shop, east along south facade from within open storage area.



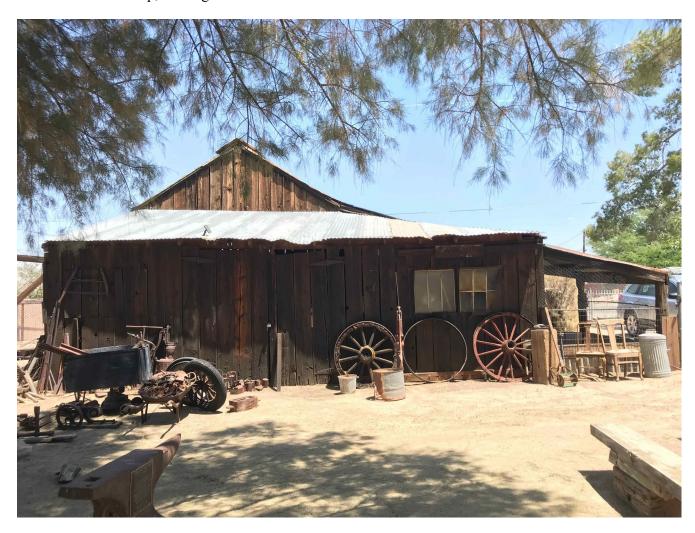
Alf's Blacksmith Shop

Name of Property

San Bernardino County, California County and State

# Photo 9 of 38

Alf's Blacksmith Shop, looking east at west facade.



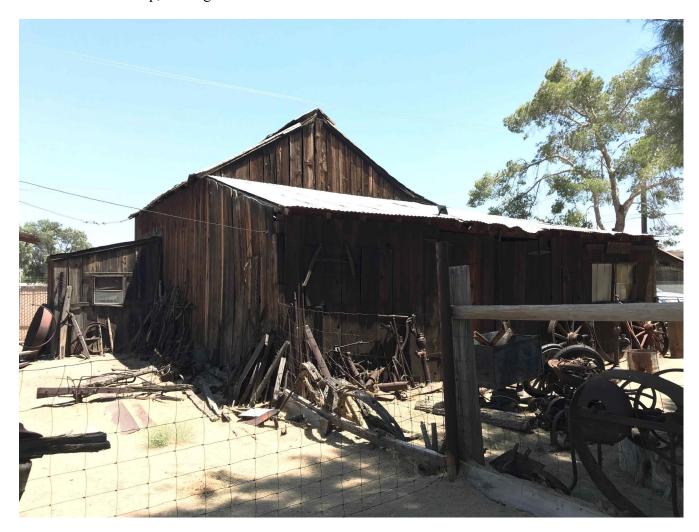
Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# **Photo 10 of 38**

Alf's Blacksmith Shop, looking southeast at north and west facades.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# Photo 11 of 38 Alf's Blacksmith Shop, looking east along north facade.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# Photo 12 of 38 Alf's Blacksmith Shop, looking south at north facade.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# Photo 13 of 38 Alf's Blacksmith Shop, looking southwest at east (primary) and north facades.

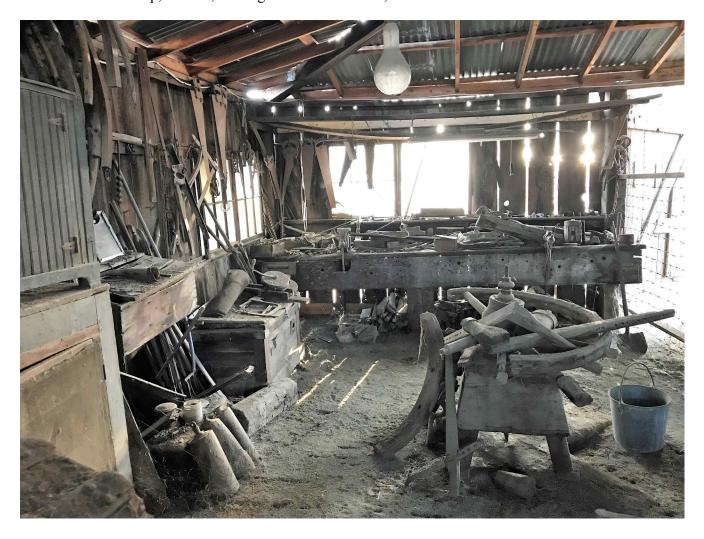


Alf's Blacksmith Shop
Name of Property

San Bernardino County, California County and State

# **Photo 14 of 38**

Alf's Blacksmith Shop, interior, looking west at workbench, etc. in southwest corner.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# **Photo 15 of 38**

Alf's Blacksmith Shop, interior, looking west at northwest corner.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# Photo 16 of 38

Alf's Blacksmith Shop, interior, looking east at farrying area in southeast corner.



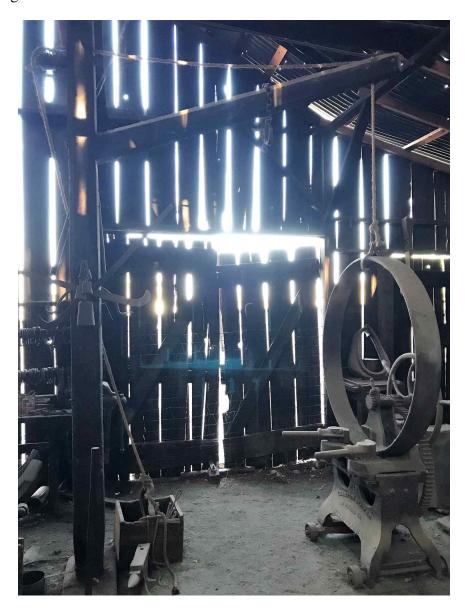
Alf's Blacksmith Shop

Name of Property County and State

San Bernardino County, California

# **Photo 17 of 38**

Alf's Blacksmith Shop, interior, looking east at main doors on east wall. Crane, tire, and tire spreading equipment in foreground.



Alf's Blacksmith Shop

San Bernardino County, California
County and State

Name of Property

# **Photo 18 of 38**

Alf's Blacksmith Shop, interior, looking northeast at forge in northeast corner.



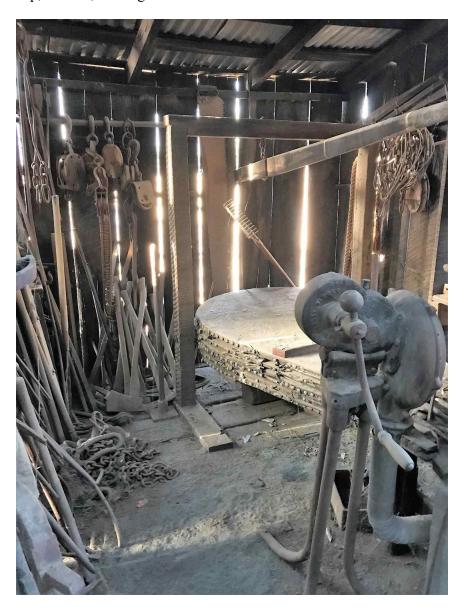
Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# **Photo 19 of 38**

Alf's Blacksmith Shop, interior, looking northeast into bellows room at northeast corner.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# **Photo 20 of 38**

Alf's Blacksmith Shop, interior, detail of bellows in bellows room at northeast corner.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# **Photo 21 of 38**

Alf's Blacksmith Shop, interior, looking northwest into bellows room, detail of blacksmithing tools.

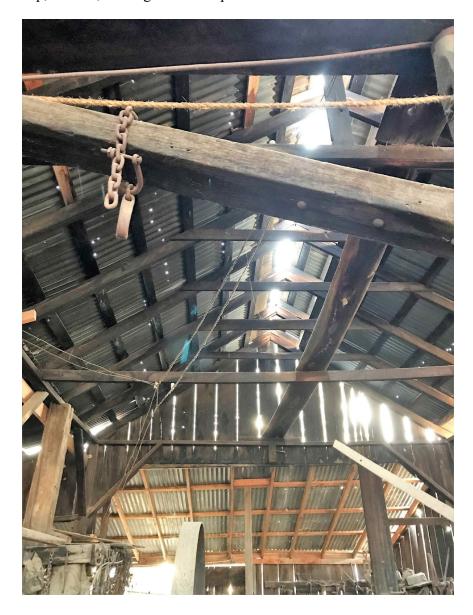


Alf's Blacksmith Shop
Name of Property

San Bernardino County, California County and State

# **Photo 22 of 38**

Alf's Blacksmith Shop, interior, looking west and upward at roof structure.

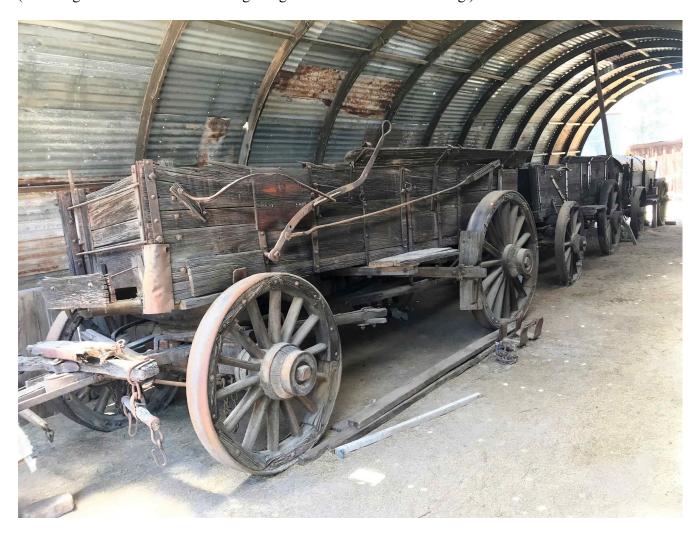


Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

# Photo 23 of 38

Alf's Blacksmith Shop contributing ore wagons, looking northwest inside non-contributing wagon shelter. (Two wagons nearest are contributing. Wagon at rear is non-contributing.)



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California County and State

# Photo 24 of 38

Alf's Blacksmith Shop contributing ore wagons, looking southwest at side and rear of ore wagon.



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California

County and State

# **Photo 25 of 38**

Alf's Blacksmith Shop contributing ore wagons, looking north at front of ore wagon.



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

# Photo 26 of 38

Alf's Blacksmith Shop contributing ore wagons, detail of interior of ore wagon.

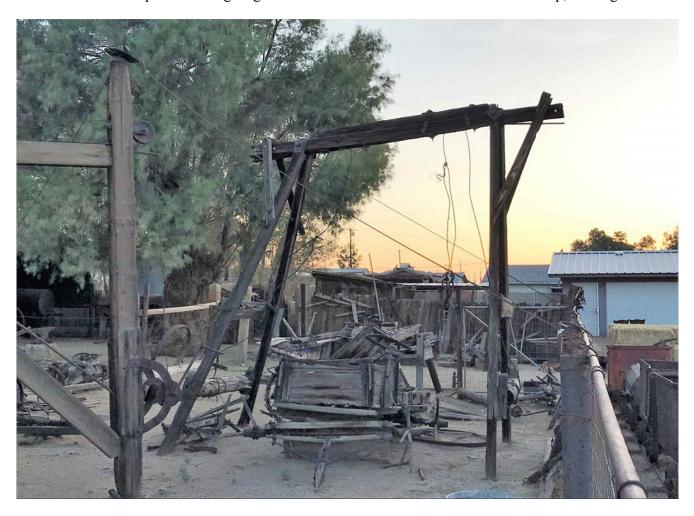


Alf's Blacksmith Shop

San Bernardino County, California
County and State

Name of Property

### Photo 27 of 38 Alf's Blacksmith Shop contributing wagon lift derrick located to immediate north of shop, looking west.



Alf's Blacksmith Shop Name of Property San Bernardino County, California County and State

#### **Photo 28 of 38**

Non-contributing bunkhouse, looking southwest at primary (east) and north facades.



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

#### **Photo 29 of 38**

Non-contributing bunkhouse, looking northeast at rear (west) and south facades.



Alf's Blacksmith Shop Name of Property San Bernardino County, California
County and State

#### **Photo 30 of 38**

Non-contributing wagon shelter, looking northwest at south end of structure.



Alf's Blacksmith Shop Name of Property San Bernardino County, California
County and State

#### **Photo 31 of 38**

Non-contributing wagon shelter, looking southwest at north end of structure.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

# Photo 32 of 38 Non-contributing overland wagon, looking northwest.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

#### Photo 33 of 38 Non-contributing southern house, looking west.



Alf's Blacksmith Shop Name of Property San Bernardino County, California County and State

# Photo 34 of 38 Non-contributing utility building, looking southwest.



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

## Photo 35 of 38 Non-contributing northern house, looking northwest.



Alf's Blacksmith Shop Name of Property

San Bernardino County, California County and State

#### **Photo 36 of 38** Non-contributing garage, looking northwest.



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California County and State

#### **Photo 37 of 38**

Contextual view looking northwest along 1st Street; subject property at left.



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California County and State

#### **Photo 38 of 38**

Contextual view looking south down 1st Street; subject property at right.



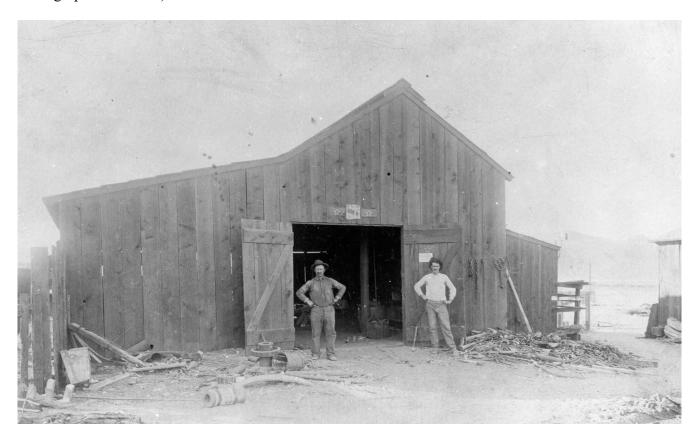
Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

#### Historic Photos

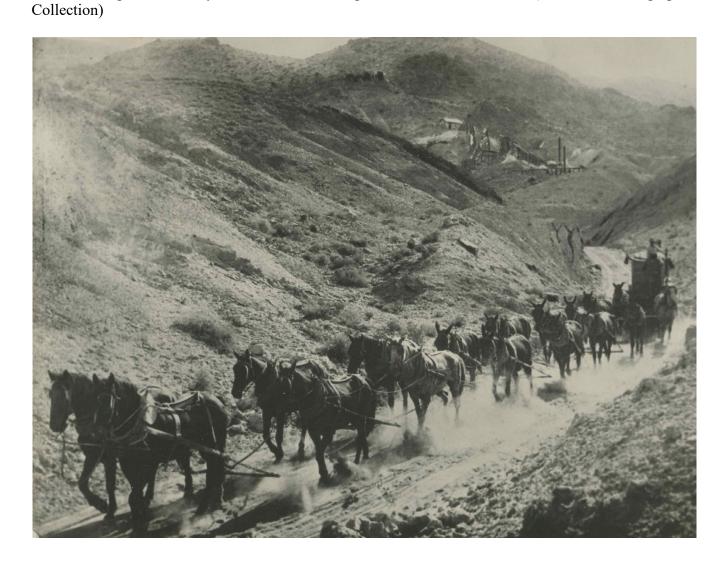
#### Figure 1

Seymour Alf (left) and Al Mudgett (right) in front of Alf's Blacksmith Shop, 1894. (Walter S. Alf Photograph Collection)



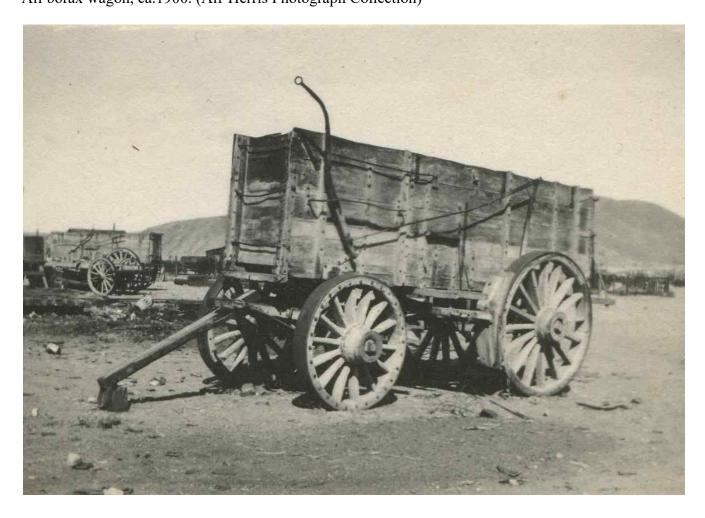
Alf's Blacksmith Shop
Name of Property

Figure 2| Alf borax wagon and twenty mule team descending from Borate mines, 1894. (Alf-Herris Photograph



Alf's Blacksmith Shop
Name of Property

Figure 3
Alf borax wagon, ca.1900. (Alf-Herris Photograph Collection)



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California County and State

#### Figure 4

Borax wagons in Daggett, no date (post 1890). A caption by Walter Alf on the back of the photo reads "These two wagons were built in our blacksmith shop for Borax Co. to their specifications and used on many trips to Borate Canyon with Alf teams." (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop Name of Property

San Bernardino County, California County and State

Figure 5

Blacksmith Bill Boreham (center) and Daggett locals in front of Alf's Blacksmith Shop, 1906. (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop

San Bernardino County, California
County and State

Name of Property

**Figure 6**Blacksmith Bill Boreham in front of Alf's Blacksmith Shop, ca. 1906. (Source unknown)



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

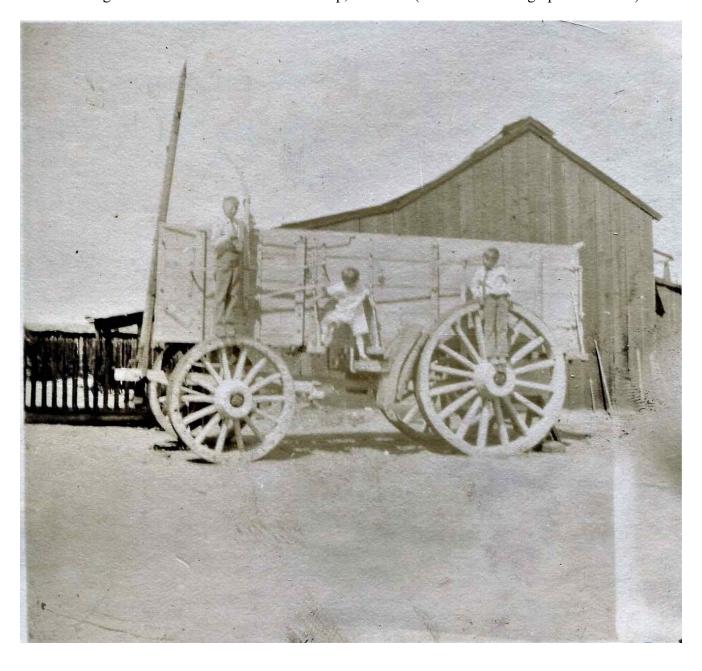
#### Figure 7

Mule corrals on western side of property. Alf's Blacksmith Shop visible at right, wagon lift derrick visible in background; ca. 1911. (Alf-Herris Photograph Collection)



Alf's Blacksmith Shop
Name of Property

**Figure 8**Alf borax wagon in front of Alf's Blacksmith Shop, ca. 1928. (Alf-Herris Photograph Collection)



Alf's Blacksmith Shop
Name of Property

**Figure 9**Walter Alf in front of Alf's Blacksmith Shop, 1960. (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop

San Bernardino County, California County and State

Name of Property

Figure 10 Walter Alf bending a tire inside Alf's Blacksmith Shop, 1960. (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

#### Figure 11

Alf ore wagon (contributing resource) in the utility yard outside Alf's Blacksmith Shop, ca. 1960 (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

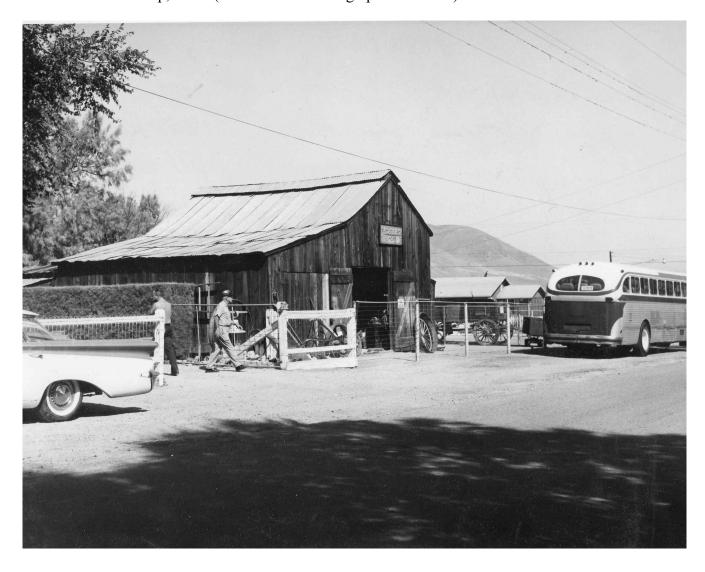
Figure 12

Wagon lift derrick and ore wagon (contributing resources) in the utility yard outside Alf's Blacksmith Shop, 1964 (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop
Name of Property

Figure 13
Alf's Blacksmith Shop, 1965. (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop
Name of Property

**Figure 14** Exterior southwest corner of Alf's Blacksmith Shop, 1965. (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

#### Figure 15

Carl Cambridge of Apple Valley Indian Museum in Alf's Blacksmith Shop, ca. 1965. (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop
Name of Property

Figure 16
Alf's Blacksmith Shop, 1968. (Walter S. Alf Photograph Collection)

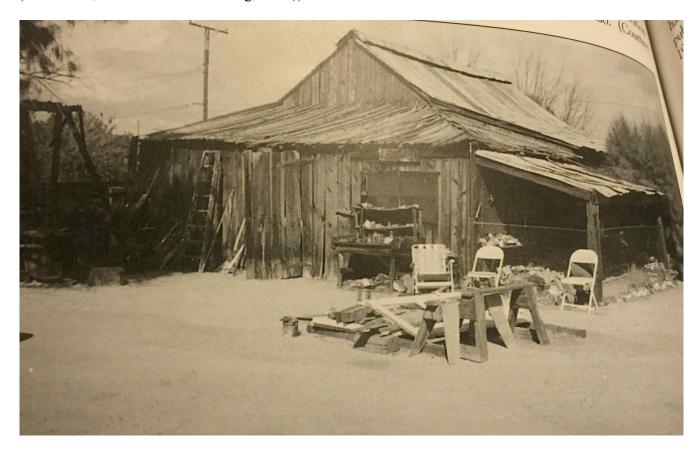


Alf's Blacksmith Shop
Name of Property

San Bernardino County, California
County and State

#### Figure 17

Alf's Blacksmith Shop, ca. 1970. (John M. Swisher, *Images of America: The Mojave Desert* (Charleston, SC: Arcadia Publishing, 1999))



Alf's Blacksmith Shop
Name of Property

Figure 18
Alf's Blacksmith Shop in snow, ca. 1970. (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop
Name of Property

Figure 19
Alf's Blacksmith Shop, 1971. (Walter S. Alf Photograph Collection)



Alf's Blacksmith Shop
Name of Property

Figure 20
Seymore Sylvester Alf, blacksmith shop proprietor, no date. (Alf-Herris Photograph Collection)

