HISTORY COLORADO

COLORADO STATE REGISTER OF HISTORIC PROPERTIES NOMINATION FORM

SECTION I				
Name of Property				
Historic Name Palmer Lake Star	*			
Other Names Palmer Lake's "Star of Bethlehem"				
Address of Property	[] address not for publication			
Street Address 500 Highland Road	·			
City Palmer Lake, Colorado County El P	Paso Zip 80133			
Present Owner of Property (for multiple ownership, list the names and addresses of e	each owner on one or more continuation sheets)			
Name Town of Palmer Lake				
Address PO Box 208, 42 Valley Crescent Rd	Phone <u>719-481-2953</u>			
City Palmer Lake State Colo	<u>rado</u> Zip <u>80133</u>			
Owner Consent for Nomination (attach signed consent from each owner of property - see attached form)				
Preparer of Nomination				
Name _ Jack Anthony	Date <u>5 Oct 2012</u>			
Organization Palmer Lake Historical Society				
Address	Phone			
City Colorado Springs State Colo	<u>Zip 80920</u>			
	;			
FOR OFFICIAL USE:	Site Number <u>5EP.7092</u>			
5 Oct 2012 Nomination Received	Senate # 4th House # 20th			
18 Jan 2013 Review Board Recommendation Approval Denial				
Taward Mulusu	Listing Criteria ☐ A ☐ B ☐ C ☒ D ☐ E			
Certification of Listing: President, HISTORY COLORADO	Date			

Property Name Palmer Lake Star SECTION II **Local Historic Designation** Has the property received local historic designation? [X] no Date designated _____ Designated by _____ (Name of municipality or county) **Use of Property** Historic Recreation Current Recreation Original Owner Arthur & Reba Bradley (Owned land in 1935 when star built, deeded to Palmer Lake 24 Jan 1966) Source of Information: Rod VanVelson and Jane VanVelson Potts, "Star Light, Star Bright" 1980, Revised 29 Oct 2008, Roger Davis and H. Edwards. Year of Construction 1935 Source of Information: Rod VanVelson and Jane VanVelson Potts, "Star Light, Star Bright" 1980, Revised 29 Oct 2008, Roger Davis and H. Edwards, Architect, Builder, Engineer, Artist or Designer Architect: B.E. Jack; Engineer: Byron Medlock; Builders: Bert Sloan, Richard Wolf, C.E. Rader, Byron Medlock, Gilbert Wolf, Floyd Bellinger, George Sill, Jess Krueger, and other volunteers Source of Information: Rod VanVelson and Jane VanVelson Potts, "Star Light, Star Bright" 1980, Revised 29 Oct 2008, Roger Davis and H. Edwards. **Locational Status** [X] Original location of structure(s) [] Structure(s) moved to current location Date of move SECTION III

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Description and Alterations

(describe the current and original appearance of the property and any alterations on one or more continuation sheets)

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Property Name_ Palmer Lake Star					
SECTION IV					
Significance of Property					
Nomination Criteria					
[] A - property is associated with events that have made a significant contribution to history					
B - property is connected with persons significant in history					
[] C - property has distinctive characteristics of a type, period, method of construction or artisan					
[X] D - property is of geographic importance					
[] E - property contains the possibility of important discoveries related to prehistory or history					
Areas of Significance					
[] Agriculture					
Significance Statement (explain the significance of the property on one or more continuation sheets)					
Bibliography (cite the books, articles, and other sources used in preparing this form on one or more continuation sheets)					
SECTION V					
Locational Information					
Lot(s) 13 Block 44, 55 Addition Town of Palmer Lake					
USGS Topographic Quad Map Palmer Lake					
Verbal Boundary Description of Nominated Property					

(describe the boundaries of the nominated property on a continuation sheet)

Property Name Palmer Lake Star SECTION VI Photograph Log for Black and White Photographs (prepare a photograph log on one or more continuation sheets)

SECTION VII

ADDITIONAL MATERIALS TO ACCOMPANY NOMINATION

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Owner Consent Form

Black and White Photographs

Color Prints or Digital Images

Sketch Map(s)

Photocopy of USGS Map Section

Optional Materials

Use of Nomination Materials

Upon submission to the Office of Archaeology and Historic Preservation, all nomination forms and supporting materials become public records pursuant to CRS Title 24, and may be accessed, copied, and used for personal or commercial purposes in accordance with state law unless otherwise specifically exempted. History Colorado may reproduce, publish, display, perform, prepare derivative works or otherwise use the nomination materials for History Colorado and/or State Register purposes.

For Office Use Only	9				
Property Type: [] building(s) [] district [] site [] structure [] object [] area					
Architectural Style/Engineering Type: N/A					
Period of Significance: <u>1935-1976</u>					
Level of Significance: [X] Local [] State [] National					
Multiple Property Submission: N/A					
Acreage 1.5 acres					
P.M. 6th Township 11S Range 67W Section 5 Quarter Sections SWNW					
UTM Reference: Zone 13 Easting 506720 Northing 4330280 NAD27					

OWNER CONSENT FORM

Each partial owner must sign a separate form. Reproduce form as needed. certify or affirm that I am the sole owner____; partial owner____; or the legally designated representative of the owners > of the land > and property | located at street number and name (or other geographic location) and that I hereby give my written consent and approval for this property's nomination to and inclusion in the Colorado State Register of Historic Properties. Isignature

9/27/12

date

OWNER CONSENT FORM

Each partial owner must sign a separate form. Reproduce form as needed.

Property Name Town of Palmer Lake
Property Name 100011 OF Tallite Lane
I, Tara Berrelle. (type or print name)
(type or print name)
Town Clerk/Treasurer
title
certify or affirm that I am the sole owner; partial owner; or the legally designated representative
of the owners ⅓ of the land x and property ∡ located at
500 Highland Rd
street number and name (or other geographic location)
Palmer Lake EI PASO county
city county
and that I hereby give my written consent and approval for this property's nomination to and inclusion
in the Colorado State Register of Historic Properties.
Mara Berroll
signature
9/27/12
date

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Property Name	Palmer Lake Star	
-		

DESCRIPTION and ALTERATIONS

On the mountain side overlooking the Town of Palmer Lake, the Palmer Lake star has been shining since 1935. The star has greeted residents and visitors traveling along State Highway 105 (then the only Front Range road between Colorado Springs to Denver) on December evenings and on special occasions. When lit the Palmer Lake Star is visible from Interstate-25, from aircraft flying overhead and from Larkspur and Greenland to Colorado Springs.

The Palmer Lake Star is built on a 1.5-acre site on Sundance Mountain, located just west of the Town of Palmer Lake. The mountainside, which has a 58 percent slope, provides the ideal location to support the framework and provide maximum exposure for the star. The five-point star has an elevation difference of approximately 252 feet and faces east of south-east at a bearing of 111 degrees. The Palmer Lake Star is comprised of 91, 40-watt special five-filament light bulbs and stands 404.8 feet long, 457.3 feet wide and 434.3 feet on the vertical diagonal of the star (see Figure 3). Thirty galvanized steel posts are situated on the site and hold the electrical wiring, light bulbs, support cables and connectors off the ground. Depending on the terrain, the posts range from 3 feet to 8 feet tall. The height of the wire and light bulbs vary throughout the star.

The star's original builders faced technical challenges to determine the appropriate location for the star, its size, and shape. They initially designed and built the star using surveyor transits and measuring devices. Over a three month time period, volunteers carried the construction materials up the mountain and slowly assembled the star. Once complete, the star's creators lit the star and had colleagues view the star from various vantage points in and around Palmer Lake (e.g. from the top of Ben Lomand Mountain to the east). Although they precisely followed the survey's design, the star did not appear as a symmetric five-point star when viewed from a distance, instead it had an oblong appearance. The builders then applied artistic license by adjusting the light bulb locations and they discovered that altering the height of the bulbs helped to provide the appearance of straight lines. Although alterations to the star have occurred since 1935, the appearance and design has remained the same since construction.

Alterations

Two technical updates occurred in 1976 and again in 2002 to replace and repair the posts, wiring, and bulbs.

1976: To help save the star from erosion, a bicentennial fund raising campaign was spearheaded by bicentennial committee president, retired Colonel Carl Frederick Duffner, and retired Sergeant First Class Harry Krueger, both Palmer Lake residents. During this repair, a helicopter airlifted new steel posts, wiring and concrete to the site. The 1976 airlift took only three hours compared to the original construction occurring over three months. The wooden posts were removed and replaced with galvanized steel posts, secured in the same locations. The original wiring and light fixtures were replaced with modern materials. When all was completed, the steel posts and light bulbs retained the original location and design and the height of the bulbs was maintained. Palmer Lake's bicentennial project was complete and the star shined with new life.

2002: This repair involved replacing the electrical wiring and light fixtures in order to meet the National Electrical Code 2002 standards. The improved electrical system ensured safe and effective operation of the star and resulted in the star using 25 percent less power. Since the older wiring produced an unbalanced electrical load, two 900-foot circuits were installed in parallel to balance the electrical load. A new type of connector called a "Coupletap" was installed to support lighting and allow ease in

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Property Name Palmer Lake Star

adjusting bulb positions without splicing into the wiring and creating the potential for corrosion. Heavy gauge "Triplex" wire was used and the team employed a turnbuckle system to adjust tension without compromising the integrity of the electrical wire. The volunteers installed new lightning protection for all of the electrical equipment. As with the 1976 updates, a helicopter was used to deliver a large 2200 lb spool of heavy wire to the top of the site. By this time, the star used special five-filament light bulbs that could withstand the forces of high winds as well as deer that occasionally cross under the star with their antlers coming in contact with the bulbs. A few posts required new concrete.

The wiring also included an automated controller that complied with the American with Disabilities Act. No longer would someone selected to turn on the star need to hike up the steep mountain side to the main controller. The remote control operation of the star ensured whoever was given the honor, could turn on Palmer Lake's star at the base of the mountain.

<u>Integrity</u>

Overall, the Palmer Lake Star retains good integrity. The star still shines upon the small community and is visible to those travelling between Denver and Colorado Springs. The site maintains its original location and the setting is the same as during the period of significance. Although there are additional homes built since 1976, they are outside the boundary. The design and form of the star have remained unchanged since the period of significance. While the posts, wiring, connectors, and light bulbs have been updated, these material and workmanship changes are in keeping with nature of a structure that requires maintenance to ensure longevity and meet electrical codes. The star retains strong association with community of Palmer Lake. The feeling of awe and amazement is as true today as it was when the star was first lit in 1935. Hundreds turn out for the star's lighting each November after the annual chili supper fundraiser. It is estimated that nearly one million citizens, guests and highway traveler's gaze upon the star from both near and far vantage points.

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Property Name Palmer Lake Star

SIGNIFICANCE STATEMENT

The Palmer Lake Star is eligible at the local level under Criterion D in the area of geography /community identity for the period of 1935-1976. This site is a focal point within the community of Palmer Lake and has become the most identifiable landmark for those inside and outside of the town. In 1935, community members initially wanted to create a symbol that would mark their location and deemed the mountainside overlooking the town as the best location to hold the star. Sundance Mountain's steep grade provided an ideal location to display a lighted symbol. While the materials used to construct the star have been replaced, the setting, feeling, association, location, design, and intent of the star have remained the same. The star serves not only as a geographic point and as visual landmark for the Town of Palmer Lake, but has been and continues to be a central part of the community. The site on Sundance Mountain and the star helped establish a strong sense of place and community. It has served as the distinctive holiday season feature identified with Palmer Lake since 1935. It shines from dusk to dawn in December as well as on Memorial Day weekend, Veteran's Day, the Fourth of July, and occasionally to mark momentous events. The initiatives to save the star further demonstrate the importance of the star to the community. In 1976 and 2002, the members of the small town raised funds and served as volunteers to repair the star and ensure that it remains a viable part of the community.

The origin of a letter or symbol used to mark a location, municipality, or organization "can be traced to a single decade, 1905-1915." The first documented monogram is the University of California's "C" in Berkeley constructed in 1905. This was quickly followed by numerous letters marking other schools. Mountain monograms, hillside letters, and lighted symbols are generally found in 14 western states. The predominance of western symbols is primarily due to the climate, vegetation, and topography of the west. Large hillsides with little vegetative cover provide better locations for display and require less maintenance and removal of natural vegetation. There are over 500 hillside letters in the U.S. and all but five are located in the western United States. Although the mountain monograms or symbols are rarely located in the eastern portion of the country, the only National Register listed resource of this property type is the neon-lit Roanoke Star in Virginia (99001375 NRIS). The Roanoke Star was constructed in 1949 and the 88.5-foot tall star is mounted on an eight-story steel tower. The only other known lit star, of comparable size, is located in El Paso, Texas. The El Paso Star, like the Palmer Lake Star is parallel to the hillside.

Historical Background

The construction and maintenance of the Palmer Lake Star demonstrates the determination, dedication and perseverance of the community. Sundance Mountain and the roadway through Palmer Lake offered a geographic opportunity to showcase a small town's "can-do" spirit for all passers-by and citizens to see. Bert Sloan, a long-time resident, summarized the feelings of most Palmer Lake

¹ Lucretia Vaile Museum, "Dizzy & The Star on Sundance Mountain," 2.

² James J. Parsons, "Hillside Letters in the Western Landscape," *Landscapes*, Vol. 30, No. 1 (1988). Reprinted by Mountain Monograms, http://www.deuceofclubs.com/mts/heres_why.htm Accessed 29 November 2012.

³ Evelyn Corning, *Hillside Letters A to Z: A Guide to Hometown Landmarks* (Missoula: Mountain Press Publishing Company, 2007), 2.

⁴ Based on an Office of Archaeology and Historic Preservation survey of other State Historic Preservation Offices, there are no other hillside letters, mountain monograms, or lighted symbols listed on any other State Registers.
⁵ Anne Stuart Beckett, "Roanoke Star National Register of Historic Places Nomination," 1999, 1.

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COLORADO STATE REGISTER OF HISTORIC PROPERTIES CONTINUATION SHEET

Property Name Palmer Lake Star

citizens when he answered a tourist's question concerning what the town's people did during the 1930s: "We tried to keep the town from dying and make it a good place to live. We wanted to do something the town could be proud of for many years and the star did just that." 6

In June 1935, B. E. Jack, regional manager of Mountain Utilities, introduced the idea of a lighted star that would be noticeable for miles and be Palmer Lake's contribution for the Christmas season. He met Bert Sloan at Sloan's Café and described a giant star on Sundance Mountain. Jack believed the steep slope would be the best location for the star. Since State Highway 150 passed through Palmer Lake, the star would be visible to all who traveled between Denver and Colorado Springs.

Sloan's Café became the planning center for the star. Arthur Bradley, who owned the site on Sundance Mountain, granted permission to build the star on his land. Arthur and Reba Bradley eventually deeded the site to the Town of Palmer Lake on 24 Jan 1966. Further discussion took place with other Mountain Utilities linemen, Richard Wolf and C. E. Rader, who detailed the electrical wiring plans. Local citizen and surveyor, Byron Medlock, designed the five-point star. Jack convinced Mountain Utilities to contribute used poles and electrical cable for the star. The Palmer Lake City Council authorized a Palmer Lake Star soliciting committee and also contributed \$140 for additional materials.

Armed with a design and commitment for supplies, the skilled and passionate citizens embarked on construction of the star on the site. Since all material had to be carried up the mountain, a bucket brigade was formed by the volunteers. Each post was hand dug and when solid rock was hit, the volunteers anchored the posts with concrete. In total, 30 posts, including the steel pipes used as corner posts, held and lifted the electrical wiring off the slope to support the 91 light bulbs that outline the star. Gilbert Wolf, Floyd Bellinger, George Sill, Jess Krueger and many other townspeople worked many late evenings and Sundays. A four-legged worker also contributed. Bert Sloan's German Shepherd Dizzy was rigged with a small pack that Dizzy used to carry supplies to workers. By fall, the star was complete.

Initially, when the volunteers turned on star, the bright 100-watt bulbs gave off a fuzzy glow. The bulbs were replaced with 25-watt bulbs and a distinct outline was the result. However, despite precision measurements, the points of the star seemed out of proportion from a distance. Observers, at different locations around Palmer Lake, provided guidance to those on site as to how to move the lights to get the desired appearance. A few new postholes were dug and the height of the lights adjusted.

With final adjustments completed by mid-December 1935, the Palmer Lake Star shone from Sundance Mountain. Beginning in 1936 the star was lit each year from December 1st to January 1st. Other occasions included Memorial Day weekend, the Fourth of July, Veteran's Day, and other momentous events. For instance, the town lit the star to mark the return of the Iran hostages in 1981.

In 1937, the Palmer Lake Volunteer Fire Department became the custodian of the star. Funds were partly raised at an annual chili supper hosted by the Palmer Lake Volunteer Fire Department. Currently, a raffle is held at the chili supper and the winner is awarded the honor of lighting the star. This has become a major community event in Palmer Lake and is traditionally held on the Saturday

⁹ Ibid., 2.

⁶ Vaile Museum, "Dizzy," 2.

⁷ El Paso County, Clerk and Recorder, Book 2115, 155.

⁸ Rod VanVelson and Jane VanVelson Potts, "Star Light, Star Bright" 1980, Revised by Roger Davis, and Hobie Edwards, (Palmer Lake Historical Society, 2005), 1-2.

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Property Name Palmer Lake Star

after Thanksgiving. Through the years, many fire department volunteers and citizens have helped maintain the star. Notable participants were Jesse Krueger and his sons. Each December from the late 1930s to early 1950s, Harry Krueger and his brothers, Orville and Kenny, were dispatched up Sundance Mountain by their dad to replace burned out bulbs. When Harry completed a 20-year Army career in 1973, he bought a house at the foot of Sundance Mountain and became the on-site guardian of the star.

The Town of Palmer Lake bicentennial committee considered several community projects to commemorate the 200th birthday of the United States. Harry Krueger proposed and championed a bicentennial project to care for the star by updating the star's original electrical wiring and fixtures as well as replacing the wooden posts with galvanized steel posts. Krueger's father was on the star's original construction team in 1935. Harry's proposal was approved and the Palmer Lake's Bicentennial committee agreed to rehabilitate the star. The volunteers sought the help of the El Pomar Foundation to help fund the purchase of supplies for the bicentennial overhaul of the star. Many citizens also donated money to help with costs and volunteers from the Palmer Lake Fire Department once again answered the call of the star and helped.

In 2002, Todd Bell, a member of the Palmer Lake Fire Department, led a second major community initiative to repair the star. He and his assistant Dan Reynolds coordinated the efforts of the Palmer Lake Volunteer Fire Department along with the historical society, town officials, and citizens of the Tri-Lakes area. Harry Krueger, leader of the 1976 project, provided historical insight based on his first-hand knowledge from the 1976 effort as well as his knowledge from caring for the star in his childhood. Krueger allowed use of his land for storage of equipment. This was an effort to update the star to meet the electrical codes for safety and efficient use of power as well as enable the star to be activated remotely.

In all endeavors the star has maintained its original design down to the precise number of light bulbs in the position and height that gave the same appearances as in December 1935. The Palmer Lake Star has greeted travelers and citizens as they crossed over the Palmer Divide going to and from Denver. Even as the interstate system was built in the 1950s, the star shined upon their travels from its site on Sundance Mountain. Since 1935, the citizens of Palmer Lake have kept the dream of a star on Sundance Mountain alive and shining brightly. Each December and on other special occasions, the Palmer Lake Star shines from Sundance Mountain through the night for all to see. 11

¹⁰ Ibid.. 3

¹¹ Mary Maynard, "Star of Wonder," *Colorado Country Life*, Dec 2002.

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Property Name Palmer Lake Star

BIBLIOGRAPHY

Anthony, Jack. "Star of Palmer Lake Shines On." Gazette Telegraph, 11 Dec 2008.

Beckett, Anne Stuart. "Roanoke Star National Register of Historic Places Nomination." 1999.

Corning, Evelyn. *Hillside Letters A to Z: A Guide to Hometown Landmarks*. Missoula: Mountain Press Publishing Company, 2007.

El Paso County Clerk and Recorder. Book 2115. El Paso County Records.

Lucretia Vaile Museum. "Dizzy & The Star on Sundance Mountain." 2010.

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Parsons, James. J. "Hillside Letters in the Western Landscape." *Landscapes*, Vol. 30, No. 1 (1988). Reprinted by Mountain Monograms. http://www.deuceofclubs.com/mts/heres_why.htm. Accessed 29 November 2012.

VanVelson, Rod and Potts, Jane VanVelson. "Star Light, Star Bright." 1980. Revised by Davis, Roger and Edwards, Hobie. Palmer Lake Historical Society, 2005.

Property Name Palmer Lake Star

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The Palmer Lake Star is located on the side of Sundance Mountain, which is just to west of the Town of Palmer Lake. The boundary encompasses the structure of the star, steel posts, and electrical components on the 1.5 acre site.

Figures

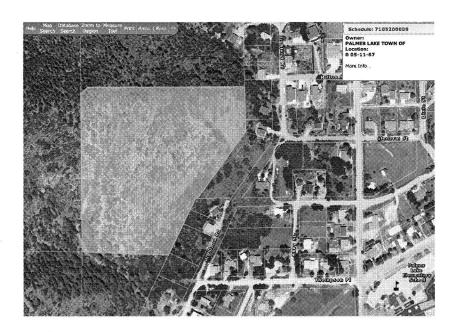


Figure 1: Map of 14 acres deeded to Town of Palmer Lake.

Property Name Palmer Lake Star

USGS TOPOGRAPHIC MAP

Palmer Lake Quadrangle 7.5 Minute Series

PLSS: T 11S, R 67W, Section 5

Elevation: 7,570 feet

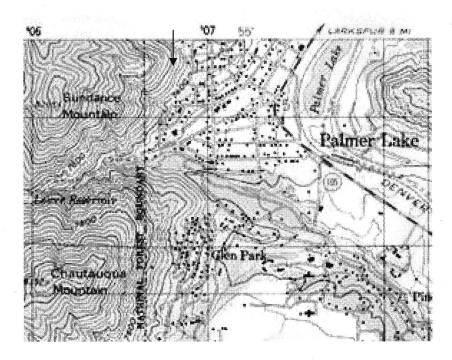


Figure 2. Extract from Palmer Lake Quad with Palmer Lake and Sundance Mountain

Property Name Palmer Lake Star

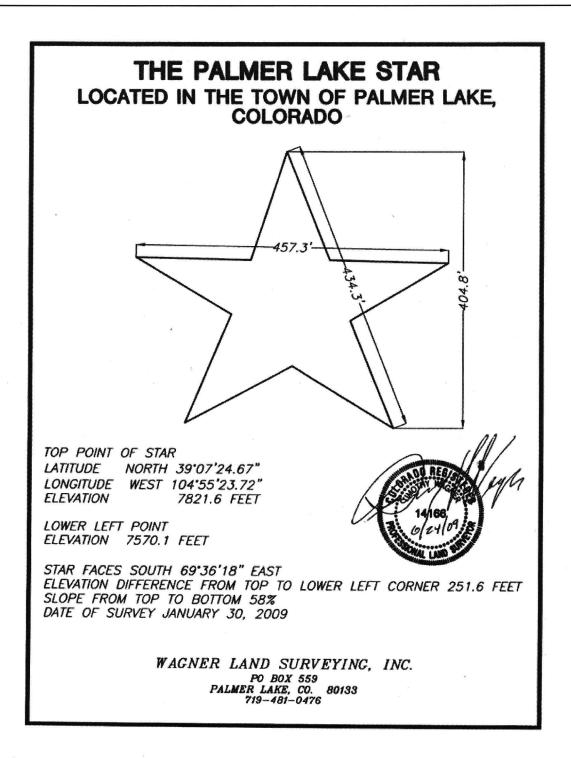


Figure 3. Palmer Lake Star Survey

Property Name Palmer Lake Star

PHOTOGRAPH LOG

Historic Photos are courtesy of the Palmer Lake Historical Society's Vaile Museum.

Historic Photo 1. View from east of lake looking west. Circa 1936. Photographer unknown.

Historic Photo 2. West view from highway west of lake. Circa 1936. Photographer unknown.

Historic Photo 3. Post card circa 1936. Photographer unknown.

Name of Property: Palmer Lake Star

Location: Palmer Lake, Colorado

Photographer: Jack Anthony

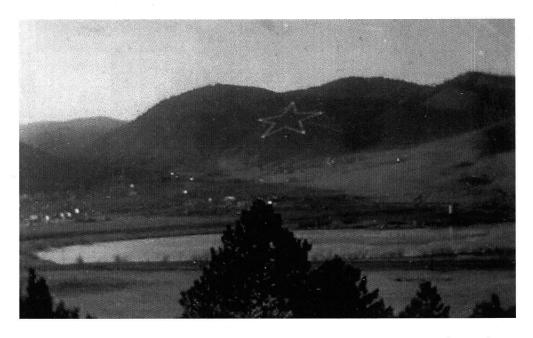
Date of Photographs: Vary (date noted per photograph)

Digital tifs on file at OAHP

Photo 001. View of site from northeast, March 2012.

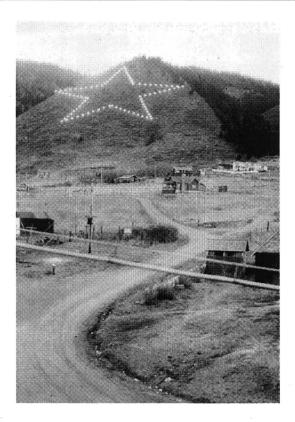
Photo 002. View of site from northeast, 28 December 2010 while star is illuminated.

Photo 003. Close-up of southwest branch and point of the star electrical and lighting March 2012.

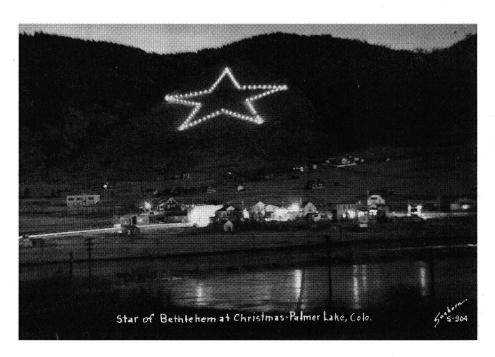


Historic Photo 1. View from east of lake looking west. Circa 1936. Photographer unknown. (Vaile Museum)

Property Name Palmer Lake Star



Historic Photo 2. West view from highway west of lake. Circa 1936. Photographer unknown. (Vaile Museum)



Historic Photo 3. Post card circa 1936. Photographer unknown. (Vaile Museum)

WEST SKETCH MAP RIDGE SOUTHWEST SCOPE NORTH SCOPE OUTLINE OF STAR A VIEWED FROM OVERHEAD (SATELLITE IMAGERY HIGHLAND ROAD SUNDANCE MOUNTAIN HILISIDE ROAD Power Poke NORTH 1999 HIGHLAND ROAD THOMESON R ABBEYST で予えて MICION ST NOTTOSCALE HIGH ST.



