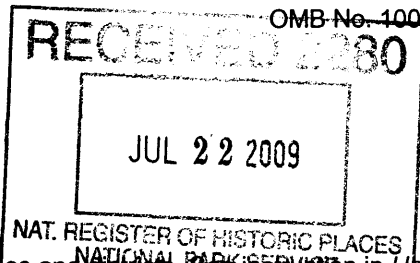


United States Department of the Interior
National Park Service
National Register of Historic Places
Registration Form

667



This form is for use in nominating or requesting determination for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an 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. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Denver & Rio Grande Western Railroad Boxcar No. 3132

other names/site number 5MN.9098

2. Location

street & number Approximately 1 Mile North by Northeast of US 50 at Cimarron, near Morrow Point Dam Road, Curecanti National Recreation Center (CURE) [N/A] not for publication

city or town Cimarron [N/A] vicinity

state Colorado code CO county Montrose code 085 zip code 81220

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this [X] 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 [X] meets [] does not meet the National Register criteria. I recommend that this property be considered significant [] nationally [X] statewide [] locally. ([] See continuation sheet for additional comments.)
Signature of certifying official/Title: [Signature] Chief, National Park Service
Date: 7/21/09
State or Federal agency and bureau: National Park Service

In my opinion, the property [X] meets [] does not meet the National Register criteria. ([] See continuation sheet for additional comments.)
Signature of certifying official/Title: [Signature] Deputy State Historic Preservation Officer
Date: 6/29/09
Office of Archaeology and Historic Preservation, Colorado Historical Society
State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

- [X] entered in the National Register [] See continuation sheet.
[] determined eligible for the National Register [] See continuation sheet.
[] determined not eligible for the National Register.
[] removed from the National Register
[] other, explain [] See continuation sheet.

Signature of the Keeper: [Signature] Date of Action: 9-2-09

Name of Property

County/State

5. Classification

Ownership of Property

(Check as many boxes as apply)

- [] private
[] public-local
[] public-State
[X] public-Federal

Category of Property

(Check only one box)

- [] building(s)
[] district
[] site
[X] structure
[] object

Number of Resources within Property

(Do not count previously listed resources.)

Contributing

Noncontributing

Table with 2 columns: Contributing, Noncontributing. Rows for buildings, sites, structures, objects, and Total.

Name of related multiple property listing.

(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register.

0

6. Function or Use

Historic Function

(Enter categories from instructions)

TRANSPORTATION/ rail-related

Current Functions

(Enter categories from instructions)

RECREATION AND CULTURE/ museum

7. Description

Architectural Classification

(Enter categories from instructions)

NO STYLE

Materials

(Enter categories from instructions)

foundation
walls WOOD
roof METAL
other WOOD

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ ColoradoSection number 7 Page 1**DESCRIPTION**

Denver & Rio Grande Western (D&RGW)¹ Boxcar No. 3132, which measures 8'2" x 30', is on exhibit on an historic D&RG Pratt Truss Bridge. (The bridge is currently listed on the National Register as D&RG Narrow Gauge Trestle, NRIS #76000172).² The car is one of a number of historic transportation-related resources within Curecanti National Recreation Area. Although the historic rolling stock never leaves Curecanti National Recreation Area, the National Park Service may occasionally rotate Boxcar No. 3132 with other railroad cars on exhibit at the Cimarron Visitor Center within Curecanti National Recreation Area, an interpretive facility constructed at the former location of the D&RGW rail yard in the townsite of Cimarron, Colorado. The car may also move to the visitor center maintenance area for repairs and preservation treatments. This boxcar is currently one of three pieces of narrow gauge equipment and/or rolling stock on exhibit at the D&RG Pratt truss bridge, approximately one and a half miles away from the Cimarron Visitor Center.

While the boxcar is currently on the bridge, both the Visitor Center, maintenance area, and bridge are appropriate locations for exhibiting the boxcar. They provide an appropriate setting, allowing the boxcar to convey its significance as an important vehicle to the daily operations of the railroad.

The boxcar is an excellent example of the rolling stock that worked the narrow-gauge rails and helped in the expansion of the mineral and livestock industries of western Colorado and northwestern New Mexico. American Car & Foundry (ACF) in St. Louis, Missouri, built the 3000-series freight car in the years 1903 and 1904. Like many other pieces of rolling stock serving the D&RG, Boxcar No. 3132 underwent various modifications and modernizations by the railroad to extend its service life. In 1973, the boxcar, along with Locomotive No. 278 (listed on the National Register 4/21/2009, NRIS # 09000223) and Caboose No. 0577 (listed on the National Register 4/21/2009, NRIS # 09000222), were placed at their current location and repainted by William Jones in 1975.³

Specifications

Boxcar No. 3132 was one of 750 new boxcars ordered by the Denver & Rio Grande from American Car and Foundry (ACF) of St. Louis, Missouri, in 1903-04 at a cost of \$708.50 each. This was a period of modernization on the railroad with approximately 1,700 narrow-gauge-gauge cars ordered. At the time, the boxcar fleet of 1,259 cars was second in numbers only to coal/gondola cars, which totaled over 2,000. In all, the "Baby Road" had 3,873 narrow-gauge freight cars of all types on its rosters.⁴

American Car & Foundry built the 3000-series cars almost completely of wood. The car's superstructure and floor are wood with exterior walls of vertical wood siding. The roof is slightly pitched.

¹ The Denver & Rio Grande Western Railroad Company (D&RGW) had several predecessors. The railroad first incorporated in 1870 as the Denver & Rio Grande Railway Company (D&RG) and became the Denver & Rio Grande Railroad Company in 1886. Beginning in 1921 the railroad operated as the Denver and Rio Grande Western Railroad Company. The name of the railroad equipment includes the title of the contemporary railroad associated with either the construction or rebuilding of the resource, in this case the car's conversion, at the designated period of significance

² The 1976 National Register nomination incorrectly identified the bridge as a trestle. The correct engineering terminology for the span of bridge is Pratt truss. The nomination form should be amended to update the information and correct the name.

This nomination form will consistently refer to the bridge by its correct name: Pratt truss.

³ Jerry B. Day, "The History of C-16-#278," *The Prospector*, First Quarter 2003, Vol. 2, No. 1, pp. 8-9.

⁴ AFE Index Card No. 11473; Denver and Rio Grande Railroad Company Annual Report for The Fiscal Year Ended June 30, 1904 (Denver: The Smith-Brooks Printing Co., 1904), pp. 6,33,47.

National Register of Historic Places Continuation Sheet

United States Department of the Interior National Park Service

Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number 7 Page 2

Boxcar No. 3132 measures 30' over the end sills and 7'7" over the side sills. The car is rated for a cargo capacity of 50,000 pounds and rode on 26-inch cast iron wheels in ACF 25-ton 3'7" wheelbase arch bar trucks. ACF shipped the cars to the Denver & Rio Grande on standard-gauge flat cars to Pueblo, adding the brake rigging here. The railroad then moved the cars through the Royal Gorge to Salida, where they were placed into service on the narrow-gauge lines.⁵

Alterations

In October 1912 the railroad added new safety appliances worth \$25.22 to each car to bring them into conformance with the safety standards required by Safety Appliance Act of 1910. Because of the Act, in 1911 the Interstate Commerce Commission (ICC) mandated the standardization of safety-related features, such as the design and placement of brake wheels, running boards or roofs walks, and ladders and grab irons.⁶

Beginning in 1924, the railroad started a "rebuilding" of the 3000-series cars, ostensibly as a way of getting new equipment without assuming a new tax burden. A short article in a 1924 issue of *Railway Age* gave an overview of what the "rebuilding" process entailed. Essentially these became new cars almost from the ground up. An anecdotal joke among later D&RGW employees stated that this was equivalent to "jacking up the road number and replacing everything underneath."⁷ This was the last major overhaul these cars received for the remainder of their service on the D&RGW. The fact these cars served additional 40-plus years in hard railroad service is testimony to the workmanship of the D&RG's employees.

Nine groups of specialized workers at Alamosa completed rebuilds of these boxcars. The cars were completely dismantled down to the trucks. Sound wood saw reuse, but otherwise a new car was constructed. Preferred reconstruction materials consisted of Oregon pine and oak of specific dimensions for the car frame and body. A new metal roof, referred to as an XLA or outside Murphy roof, covered the car. The railroad installed Camel door hardware, consisting of new brackets and frame straps to strengthen the door. In addition to its wood components, each car required 47 bolts, 16 rivets, 4,868 nails, 732 30-penny spikes, and 134 screws. The entire process took over 80 person-hours to complete. In 1928, the car underwent unspecified repairs at a cost of \$84.⁸

Paint Schemes

Boxcar No. 3132 has always been painted the red color that it wears today. However, there are questions over which herald, if any, it should brandish. During its service with the D&RGW, four different heralds could have been applied. The first herald is known as the Curecanti herald; it was in use by the railroad during the mid-1920s rebuilding period the 3000-series cars underwent. Unfortunately, current research revealed no photographic evidence of it in use on Boxcar No. 3132.

⁵ Colorado Railroad Museum, Denver and Rio Grande Narrow Gauge Freight Cars Folio Sheets, Volume 1, Sheets 31041 and 31046; I.C.C. D.V. Form 310, Salida, 7/7/20; Jerry B. Day, *The Gunnison Train* (Gunnison: The Gunnison County Pioneer and Historical Society, 1992), p. 26; Robert E. Sloan, telephone communication, December 3, 2007.

⁶ Interstate Commerce Commission, *Code of Federal Regulations Title 49*, 1938, Section 131.1.

⁷ Blackstone Models, Data sheet for 3000 Series HOn3 Boxcars; Jeff Johnson, Oral Communication, Nov. 6, 2007.

⁸ Lucas Dreith, "Rebuilding Narrow Gauge Cars," *Railway Age* 77 (August 30, 1924): 428; AFE Index Card 11473.

**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ ColoradoSection number 7 Page 3

The first herald Boxcar No. 3132 possibly wore was the 1926-36 Royal Gorge Route herald. (See photo H3 for herald examples.)

In 1949, the D&RGW followed an austerity policy in terms of repainting its narrow-gauge freight cars, essentially only maintaining the car number and its lightweight marking, allowing almost all other data and paint to weather and fade.⁹ On February 13, 1971, Boxcar No. 3132 was photographed in Durango, Colorado, with the silica sand service designation and no heralds. When acquired by the National Park Service, the car still had a faint sand service S-3132 marking. Boxcar No. 3132 currently bears the earlier 1926-36 lettering style, and is incorrectly painted with the Royal Gorge-Moffat Tunnel herald introduced in 1936.

Integrity

The D&RGW ran through what is now the Curecanti National Recreation Area, exerting a vital influence on the locality. The outdoor rail exhibit at the visitor center and the last remaining D&RG Pratt Truss Bridge of the Black Canyon provide both an appropriate setting and location for the car, allowing the boxcar to convey its association with the railroad and its significance as an important vehicle in carrying various cargo including silica sand for oil exploration. D&RGW Boxcar No. 3132 retains a high degree of integrity, clearly conveying those elements of design, materials, and workmanship used by the D&RGW shops during one episode of the railroad's mid-1920s era freight car rebuilding program. Currently, Boxcar No. 3132 is in need of preservation work due to peeling paint, wood rot, and a thinning metal roof.

⁹ Robert E. Sloan, A Century + Ten of D&RGW Narrow Gauge Freight Cars, 1871-1981. (Winona, MN: BHI Publications, 2000).

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- [X] A Property is associated with events that have made a significant contribution to the broad patterns of our history.
[] B Property is associated with the lives of persons significant in our past.
[X] 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.
[] D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- [] A owned by a religious institution or used for religious purposes.
[] B removed from its original location.
[] C a birthplace or grave.
[] D a cemetery.
[] E a reconstructed building, object, or structure.
[] F a commemorative property.
[] G less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

Areas of Significance

(Enter categories from instructions)

TRANSPORTATION
ENGINEERING

Periods of Significance

1925-1959

Significant Dates

1925

Significant Person(s)

(Complete if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

AMERICAN CAR & FOUNDRY
DENVER & RIO GRANDE WESTERN RAILROAD

9. Major Bibliographical References

Bibliography

(Cite the books, articles and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- [] preliminary determination of individual listing (36 CFR 67) has been requested
[] previously listed in the National Register
[] previously determined eligible by the National Register
[] designated a National Historic Landmark
[] recorded by Historic American Buildings Survey
[] recorded by Historic American Engineering Record

Primary location of additional data:

- [X] State Historic Preservation Office
[] Other State Agency
[] Federal Agency
[] Local Government
[] University
[] Other

Name of repository:
Colorado Historical Society
Cimarron Visitor Center (CURE)

National Register of Historic Places Continuation Sheet

United States Department of the Interior National Park Service

Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number 8 Page 4

SIGNIFICANCE

Denver & Rio Grande Western Railroad Boxcar No. 3132 is eligible for the National Register at the State level of significance under Criterion A in the area of **Transportation**. The boxcar is associated with the freight train operations of the D&RGW and, in particular, with the railroad's role in helping to develop the great oil and gas fields of the Paradox and San Juan basins of western Colorado and northwestern New Mexico in the decades following World War II. Boxcars are the workhorses of any railroad, carrying almost any type of commodity. Boxcar No. 3132 is historically significant in that it was one of only seven known D&RGW 3000-series narrow-gauge gauge boxcars to serve part of its career carrying silica sand, an important additive used in the production of the oil and gas from the emerging fields in Colorado and New Mexico in the 1950s. The period of significance for Criterion A begins in 1925, with the conversion of the car by the railroad. As the historically significant activities associated with the boxcar extend into a period less than fifty years before the nomination date, and because these recent activities are not considered to be exceptionally important, the period of significance ends in 1959, in keeping with National Register guidelines.

D&RGW Boxcar No. 3132 is also eligible under Criterion C in the area of **Engineering** at the Local level of significance as an excellent example of the 3000-series freight boxcars that served as the backbone of the railroad's efforts to modernize its narrow-gauge operations. This car illustrated the methods of construction used in building wooden narrow-gauge freight cars of the period. The conversion of the car in 1925 reflects the railroad's efforts to modernize their cars- adding new siding, Camel door locks, drive gear, Murphy roof, and K-1 triples. Rebuilt by D&RGW shop workers in Alamosa, Colorado, the boxcar operated over the railroad's narrow-gauge system for over forty years, until stricken from the rolls in 1970. The period of significance for Criterion C is 1925, the year in which the boxcar was overhauled into its present version.

Denver & Rio Grande Western and Narrow Gauge

While many railroads eventually came to Colorado, no railroad would come to be identified with, and symbolize the greatness of the state, more than the Denver & Rio Grande (D&RG). No railroad was to make as significant a contribution to the economic development of the Colorado-Utah-New Mexico region than the D&RG (later the D&RGW). Indeed, it was often said that wherever the Rio Grande went, development and settlement followed.¹⁰

Incorporated in 1870, the Denver and Rio Grande Railway was the dream of William Jackson Palmer, a Civil War veteran turned railroad man. In a time when most railroads were busy building East to West, Palmer envisioned a North-South line linking Denver and El Paso, Texas, and, eventually, Mexico City. Palmer, an avid believer in the West's vast mineral and agricultural potential, especially for the raising of livestock, desired to build a transportation system that would tap into the wealth these resources could provide.

Rich gold and silver deposits were locked in the remote vastness of the mountains, but successful development of mines required reliable transportation. Palmer also recognized the unique quality of the wheat that could be grown in the high and dry mountain valleys. This type of hard, high protein wheat

¹⁰ James H. Baker, ed., *History of Colorado* (Denver: Linderman Co., Inc., 1927), 818; O. Meredith Wilson, *The Denver and Rio Grande Project, 1870-1901: A History of the First Thirty years of the Denver and Rio Grande Railroad* (Salt Lake City: Howe Brothers, 1982), 62 and 114.

**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ ColoradoSection number 8 Page 5

would eventually come to be in high demand by the milling industry. But, as Palmer and other enthusiastic boosters of the future state freely admitted, "Colorado without railroads is comparatively worthless."¹¹

Railroad building in the Rocky Mountain West offered challenges not faced elsewhere in the country. Geography and topography presented formidable demands and barriers to railroad design and construction. The mountains and the steep-walled narrow valleys of western Colorado, especially environmental factors influencing curvature and gradient, tested the skills of engineers to develop equipment types that could operate in such settings.

One solution to the formidable construction challenges that Palmer faced was to build his railroad as a narrow-gauge line. At this time, there was no standardized track gauge - the distance between the inside of the rail heads - in America. While President Lincoln recommended a five-foot gauge for the nation's first transcontinental railroad, there were other gauges in use - including a six-foot gauge on the Erie. Indeed, it was not until 1886 that a "standard gauge" of four-foot eight-and-one-half inches became the norm for American railroads.

Narrower-gauged railroads had become popular in Europe, however, and what was called "narrow-gauge fever" spread to the United States during the 1870s. In 1876, for example, there were 81 narrow-gauge railroads operating in 26 states, but nowhere were they more effective and longer lived than in the Rocky Mountain West.¹² Howard Schuyler, a Palmer associate, visited the two-foot gauge Festiniog Railway in North Wales and compared its operation favorably with what the Rio Grande was considering. Palmer himself traveled to England on his honeymoon and talked with narrow-gauge advocates there. Subsequently, Palmer decided to adopt a three-foot gauge for his "Baby Road," as it was affectionately known by its supporters. The Rio Grande was to be the first major narrow-gauge railroad in the United States, and the first north-south line west of the Mississippi River.¹³

Narrow-gauge railroading promised several initial advantages. Proponents of narrow gauge argued strongly about the substantial cost savings that would be realized in construction and operating costs versus those for standard gauge. By following the local topography as tightly as possible, costs in mountainous terrain were estimated to be about one-fifth of what standard gauge costs would be. In broken and rolling country, the type of country where the Rio Grande would start, costs were estimated to be about one-half that of standard gauge.

Roadbeds, cuts, trestles, and tunnels could be constructed with less dirt work in rugged terrain with the narrower gauge. Lighter, less expensive rails could be used to support smaller and lighter locomotives and rolling stock that could more easily negotiate the sharp curves that would be needed to reach deep into the mountains. Also, it was anticipated that some of the branch lines of the railroad that linked the mines to their sources of supply would be built by the mining companies themselves. Thus, the narrower gauge would lower their construction costs, too. Finally, since Palmer had little competition at

¹¹ Robert G. Athearn, *Rebel of the Rockies: A History of The Denver and Rio Grande Western Railroad* (New Haven: Yale University Press, 1964; reprint, as *The Denver and Rio Grande Western Railroad*, Lincoln: University of Nebraska Press, 1977), 4-5.

¹² Stewart H. Holbrook, *The Story of American Railroads* (New York: Crown Publishers, 1947), 360.

¹³ LeRoy R. Hafen, *Colorado and Its People: A Narrative and Topical History of the Centennial State*, vol. 2 (New York: Lewis Historical Publishing Co., Inc., 1948), 647.

**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ ColoradoSection number 8 Page 6

first, he anticipated that his gauge selection would become the standard for other railroads entering Colorado.¹⁴

The decade of the 1880s was a peak period in terms of Colorado railroad construction. About 3,100 miles of track were constructed, with the majority being in the western mountains. By the summer of 1882, the railroad reached into the Black Canyon of the Gunnison on its way to Montrose and Grand Junction - part of the original main line from Denver to Salt Lake City and Ogden in Utah. The company's 1882 annual report to its stockholders indicated that the stretch through the Black Canyon required heavier work than on any other stretch of railroad in the country, and that the rock work required to navigate the canyon was more expensive than even that portion of the line from Durango to Silverton through the towering San Juan Mountains.¹⁵

In spite of numerous successes in many states, narrow-gauge railroading in America never lived up to the hype of its promoters. Perhaps William Jackson Palmer admitted as much in 1881 when the Rio Grande began to convert parts of its original line, between Denver and Pueblo, to dual gauge and ordered its first batch of standard gauge equipment. In 1890 the railroad completed a standard gauge line to Grand Junction via Tennessee Pass. As a result of the new line, the Rio Grande could offer standard gauge service between Denver and Salt Lake City and the narrow-gauge main line from Salida to Grand Junction was demoted to secondary status.

While initial construction costs of the narrow gauge were an apparent advantage, little was after that. Costs to operate the railroad in terms of train crew size, and the building of the physical plant, such as depots, maintenance, watering and coaling facilities, differed little between the two gauges. In addition, narrow-gauge cars only carried about two-thirds of the capacity of standard gauge cars. When standard gauge became the dominant track gauge in the country, break-bulk points - places where the transfer of cargo occurred between the two gauges - proved costly in terms of labor and time. Finally, the automobile and the truck began to eat away at what little profits remained for the narrow-gauge lines by furnishing cheaper and more readily accessible means of transportation.

For nearly a century, the Denver & Rio Grande's narrow-gauge lines served Colorado well. While most of the line had been converted to standard gauge, the "slim gauge" still contributed to the state's economy through World War II, hauling mail, manufactured goods, commodities, and people. Following the war, freight revenues continued to increase due to the growth of industries along the D&RGW line, however passenger traffic declined. During the 1950s the D&RGW was involved in a series of legal disputes with the Union Pacific (UP) as the former attempted to expand its operations. While taking on the powerful UP, the D&RGW abandoned lines failing to produce revenue in a manner described by Robert Athearn as "the process of pruning dead branches from the main trunk in the interest of efficiency."¹⁶

In 1948 the railroad abandoned a portion of its famous Black Canyon of the Gunnison route — part of the original main line constructed in 1882 by the D&RG.¹⁷ Narrow-gauge trackage continued to diminish over the years until finally in 1967, due to heavy financial losses, the Rio Grande decided to abandon the remaining portions of its narrow-gauge mainline between Alamosa and Durango,

¹⁴ George W. Hilton, *American Narrow Gauge Railroads* (Stanford: Stanford University Press, 1990), 49–51; Athearn, 14.

¹⁵ Hafen, 535; Denver and Rio Grande Railway Co., *Annual Report* (New York: William Mann and Son, 1882), 89.

¹⁶ Athearn, 344–345.

¹⁷ Athearn, 345.

National Register of Historic Places Continuation Sheet

United States Department of the Interior National Park Service

Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number 8 Page 7

Colorado, and the branch from Durango to Farmington, New Mexico. By the end of 1968, the last Rio Grande narrow-gauge train made its final run.¹⁸

The D&RGW, Boxcar No. 3132, and Oil and Gas Development in the Southwest

Until World War II, little production occurred in the oil and gas fields of southwestern Colorado. While a few discovery wells date back to the early 1900s, the area's remoteness and the lack of markets and funds for exploration limited development. Following the war, however, demand for oil and gas escalated. Completion of the El Paso Natural Gas Company's interstate pipeline to California in 1951 spurred development, more than doubling the drilling rate, and advances in well hydraulic fracturing technology in the 1950s and 1960s enhanced the permeability of potentially productive formations.¹⁹

The D&RGW transported a variety of products important to the oil and gas industry, such as drill pipe, well casing, drilling fluids, and silica sand. In fact, the railroad's Farmington Branch was one of the last segments of the narrow-gauge line to close due to its importance to production in the San Juan Basin.

One of the techniques developed to enhance oil and gas recovery from wells was hydraulic fracturing, and a key ingredient in fracturing fluids was silica sand. An industrial mineral, silica sand is pure and homogenous sand free of impurities - such as feldspar, mica, or iron - with smooth, evenly sized, and well-rounded grains. These characteristics make it ideal for fracturing formations and keeping the fractures open to allow gas and oil to flow to the well bore. It is worth noting that starting in the mid-1950s, sand production in many Colorado counties, including Alamosa and Mesa, closely tracks with the increase in oil and gas development in the region. By 1960, sand and gravel was ranked fifth in mineral production value in Colorado.²⁰

To meet the specialized need for silica sand, the D&RGW dedicated at least seven 3000-series boxcars, one of those being Boxcar No. 3132. Starting in 1957, the railroad provided specific markings to identify such cars. A large letter "S" in front of the car number (S-3132) indicated cars dedicated for sand service as well as signed tack boards placed beside the doors. Such dedicated service helped to avoid potential contamination of the car's interior introduced by other cargoes.²¹

There is a question as to how the sand was loaded and carried. Some think that silica sand was loaded loose in the cars, being placed at the car ends over the trucks. However, Mr. Amos Cordova, a former D&RGW freight agent at Durango, stated that he saw the sand carried in bags when he worked at Farmington, New Mexico. Bagged sand would certainly be easier to transport. The bags were stacked about half way up the height and across the length of the car. The stacking height would be consistent with the height of the interior sheathing on the 3000-series cars.²²

The interiors of the sand service cars had slight differences from the other 3000-series boxcars. The major difference entailed trying to seal the interior to prevent sand leakage as much as possible. Unlike

¹⁸ Athearn, 345.

¹⁹ Roy L. Pritchard, "The San Juan Basin," in Geologic Atlas of the Rocky Mountain Region, ed. William W. Mallory (Denver: A.B. Hirschfeld Press, 1972), p. 284.; Thomas W. Engler, Oil and Gas Resource Development of the San Juan Basin, New Mexico. Report prepared for the Albuquerque Field Office, U.S. Bureau of Land Management, May 1, 2001

²⁰ S.M. Del Rio, Mineral Resources of Colorado: First Sequel (Denver: Publishers Press, 1960), pp. 29,31,63,200.

²¹ Mallory H. Ferrell. Written communication, May 23, 2007. On file at CURE.

²² Amos Cordova, Oral communications, June and November, 2007.

**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ ColoradoSection number 8 Page 8

other boxcars, sand cars had a wooden wedge placed between the car sides and the floor to cover the body seam. In addition, painting the car floor and lower side sheathing helped seal the seams. A silica sand car at the Colorado Railroad Museum has load limit markings painted on the interior sheathing, representing how high the sand should be loaded. Due to some prior episode of repainting, Boxcar No. 3132 does not show these interior load markings, but paint analysis may uncover evidence of their existence.

The D&RGW struck Boxcar No. 3132 from its rolls in November 1970. The railroad assessed the car's value at \$981.40. Its last location on the railroad's property was at Durango, Colorado. In 1971 the National Park Service bought the car from Mr. James L. Colman of Durango for \$875.²³ Displayed on the Pratt truss bridge at Cimarron since approximately 1973, it serves to interpret the railroad history of the Denver & Rio Grande in the region.

²³ The Denver and Rio Grande Western R.R. Co., Record of Property Changes – Equipment Description Sheet Acct. No.53, Colorado Railroad Museum; Tom Klinger Railroad Prints, S-3132 photographed at Durango, Feb. 13, 1971; CURE, Request for Quotations, July 26, 1971.

**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**

Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number 9 Page 9

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**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**

Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number 9 Page 10

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10. Geographical Data

Acreage of Property less than one

UTM References

(Place additional UTM references on a continuation sheet.) (NAD 27)

- 1. 13 277598 4258776
 Zone Easting Northing
- 2. Zone Easting Northing
- 3. Zone Easting Northing
- 4. Zone Easting Northing

The UTMS were derived by OAHP from heads up digitization on Digital Raster Graphic (DRG) maps provided to OAHP by the U.S. Bureau of Land Management

[] See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Lance C. Westfall, Historian; Carl Barna, Historian (for the property owner) Forest Frost- CURE contact
 organization National Park Service; Bureau of Land Management date August 5, 2008
 street & number 12795 W. Alameda Ave.; 2850 Youngfield St. telephone (970) 240-5433
 city or town Lakewood; Lakewood state Colorado zip code 80210; 80228

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

- A **USGS map** (7.5 or 15 minute series) indicating the property's location.
- A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name National Park Service- Curecanti National Recreation Area (CURE) Superintendent: Connie Rudd
 street & number 102 Elk Creek telephone (970) 641-2337
 city or town Gunnison state Colorado zip code 81230

Paperwork Reduction Act Statement: This information is being collected for applications 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. 470 et seq).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**

Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number 10 Page 11

GEOGRAPHICAL DATA**VERBAL BOUNDARY DESCRIPTION**

The boundary of D&RG Boxcar No. 3132 extends only to the boxcar. The boxcar, whose measurements are 8'2" x 30", is located at the D&RG Narrow Gauge Trestle (NRIS #76000172), the Cimarron Visitor Center rail exhibit, or the visitor center maintenance area, all within the Curecanti National Recreation Area.

Note: D&RG Boxcar No. 3132 is currently located at the D&RG Narrow Gauge Trestle (NRIS #76000172). As such, the UTM points noted within this nomination are associated with the D&RG Narrow Gauge Trestle location.

BOUNDARY JUSTIFICATION

The boundary of D&RG Boxcar No. 3132 extends only to the boxcar. Boxcar No. 3132 and six other pieces of rolling stock are on display within Curecanti National Recreation Area. The National Park Service exhibits the railroad cars as part of its interpretative programming on the history of the D&RG and the company's famous Black Canyon of the Gunnison Route. Although the rolling stock does not leave the recreation area, park staff may occasionally rotate the cars at the Cimarron Visitor Center with cars on exhibit at the D&RG Narrow Gauge Trestle. In addition, the cars may be moved to the visitor center maintenance area for repairs and preservation treatments.

National Register of Historic Places Continuation Sheet

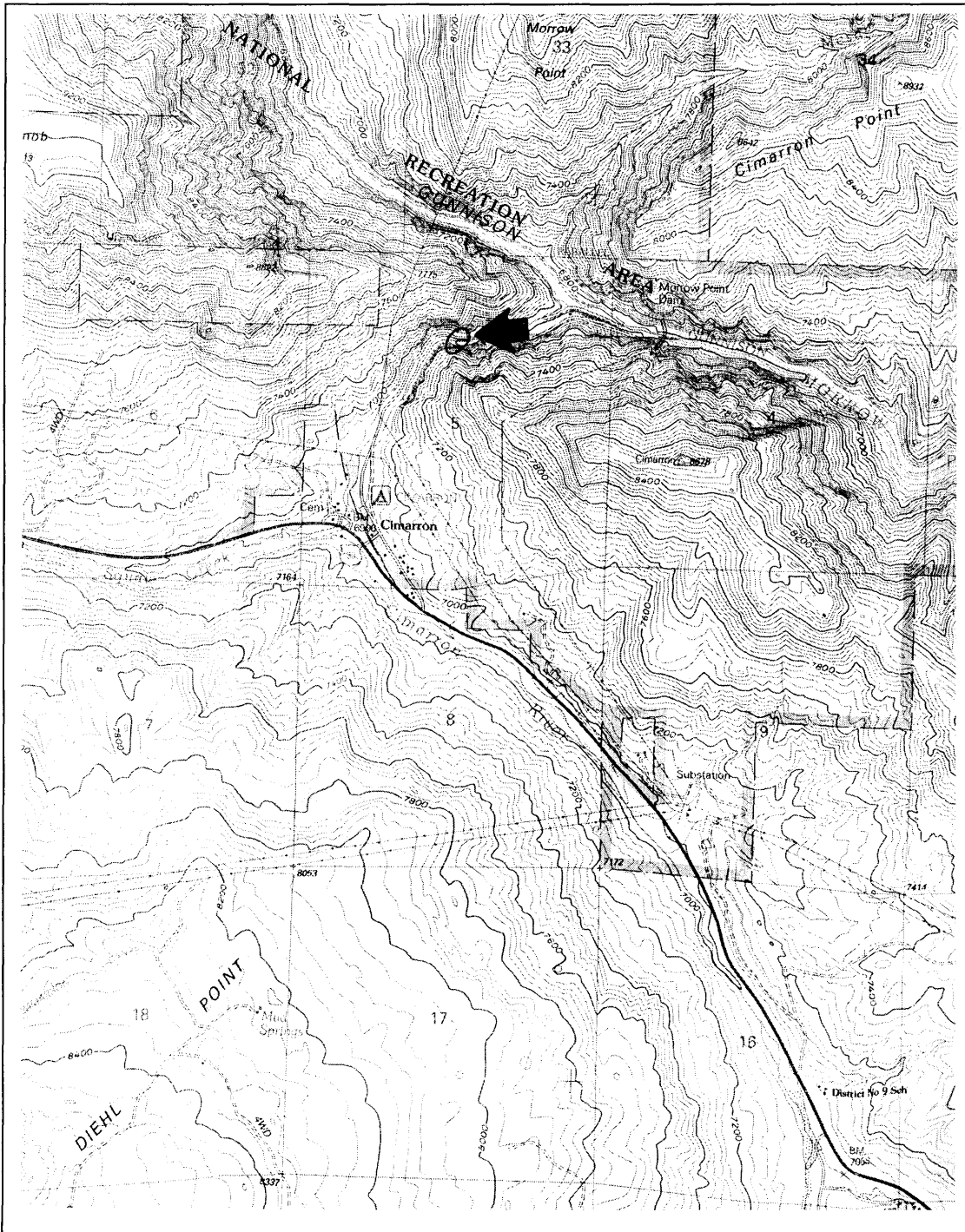
United States Department of the Interior
National Park Service

Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number ___ Page 12

USGS TOPOGRAPHIC MAP
Cimarron Quadrangle, Colorado
7.5 Minute Series

UTM: Zone 13 / 277598E / 4258776N
PLSS: NM PM, T48N, R6W, Sec. 5
NE¼, NE¼, NE¼, NW¼
Elevation: 6900 feet



National Register of Historic Places Continuation Sheet

United States Department of the Interior
National Park Service

Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number ___ Page 13

PHOTOGRAPH LOG

The following information pertains to photograph number 1:

Photographer: Forest Frost
Date of Photographs: July 2008
Negatives: cd with tiff images on file with National Park Service, Washington, D.C.

Photo No.	Photographic Information
1	Profile of Denver and Rio Grande Western narrow-gauge Boxcar #3132.

PHOTOGRAPH LOG - HISTORIC

These photographs may not be included in Internet posted documents and other publishing venues due to copyright restrictions.

Photo No.	Photographic Information
H1	D&RG Standard 3000-series Boxcar Diagram. On file at Curecanti NRA.
H2	D&RG Standard 3000-series Boxcar Diagram. On file at Curecanti NRA.
H3	Rio Grande Heralds. Source unknown.
H4	Cimarron Roundhouse- Photograph by Charles Goodman, August 1885. Source: Denver Public Library, Western History and Genealogy, Photo number CHS.Z3. Ronzio Collection.

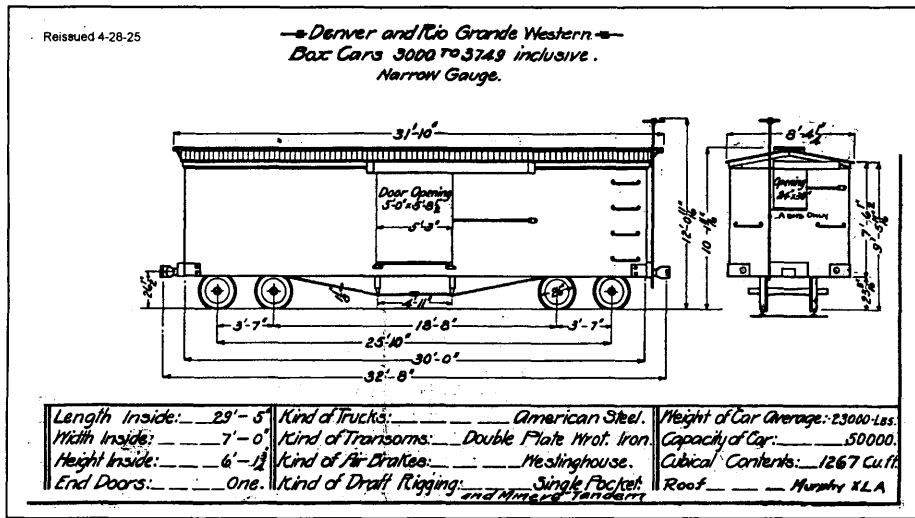
National Register of Historic Places Continuation Sheet

United States Department of the Interior National Park Service

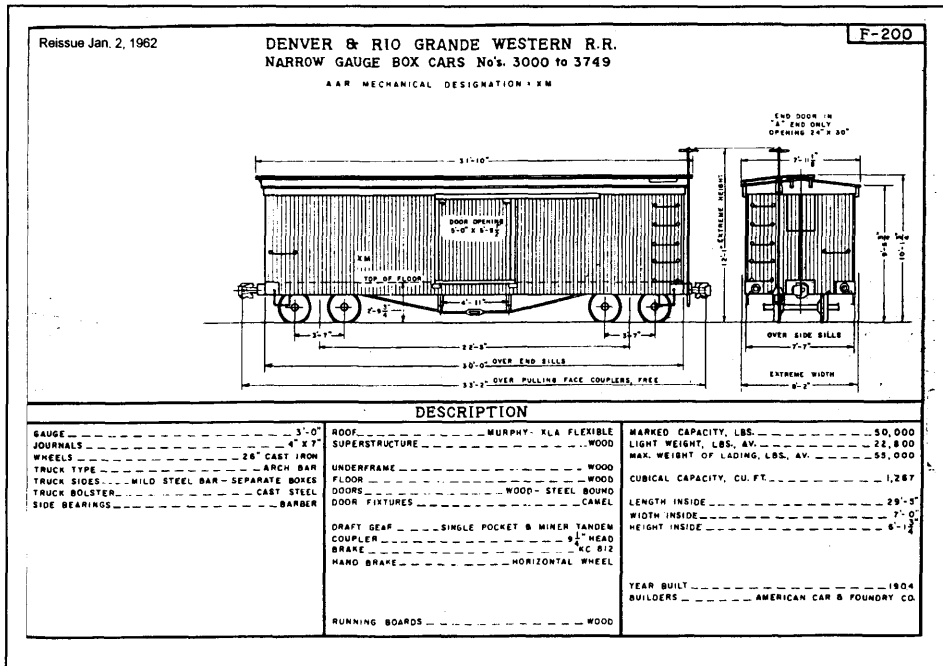
Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number ___ Page 14

H1



H2



National Register of Historic Places Continuation Sheet

United States Department of the Interior
National Park Service

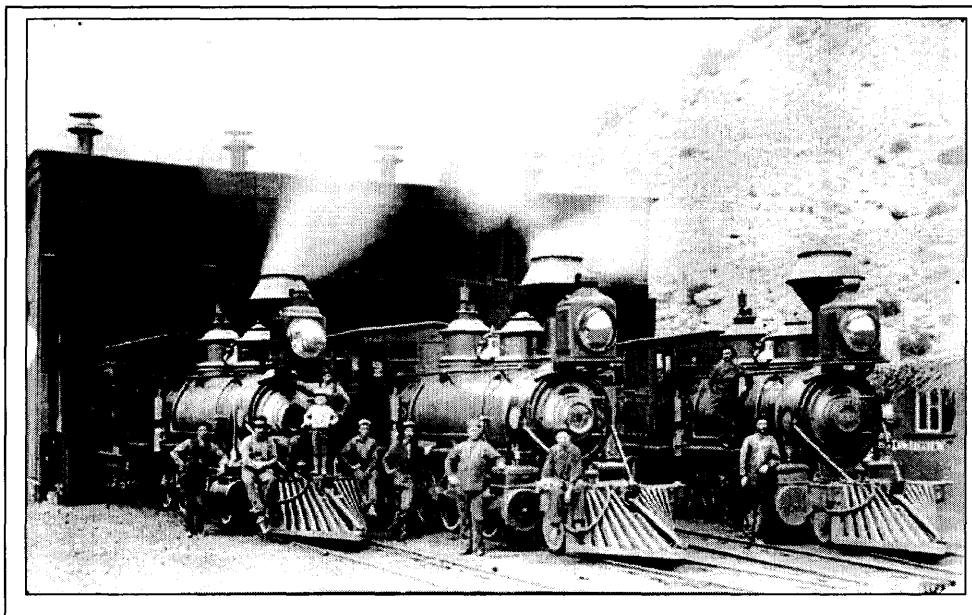
Denver & Rio Grande Western Railroad Boxcar No. 3132
Montrose County/ Colorado

Section number ___ Page 15

H3



H4



AL.A. 5-25

D&RGW

D & R G W

3132

DO NOT CLEAT DOOR



CAPACITY { 1267 CUFT.
50000 LBS.
LENGTH INSIDE 26 FT. 5 IN.
WIDTH INSIDE 7 FT. 6 IN.
HEIGHT INSIDE 6 FT. 11 IN.
WT. 22700 ALA 7 - 37
COMPLEX - 1G - 2G - RETAINER
BUILT 5-25

Name: Denver + Rio Grande Western Railroad Boxcar # 3132

County/State: Montrose, Colorado

Photographer: Forest Frost

Date: 2008

Negative: Digital

Description: Profile of Denver and Rio Grande Western narrow-gauge Boxcar #3132

Photo number: 01 CO-montroseCounty - D+RGW Box Car 3132-01.