HISTORY COLORADO

COLORADO STATE REGISTER OF HISTORIC PROPERTIES NOMINATION FORM

SECTION I			
Name of Property			
Historic Name Denver & Rio Grande V	<u>Vestern Ra</u>	ilroad Double	Deck Stock Car No. 5564
Other Names			
Address of Property			[] address not for publication
Street Address San Juan Timberwrights,	60 Barton Ci	rcle	
City Arboles	County	Archuleta	Zip <u>81121</u>
Present Owner of Property (for multiple ownership, list the names and add	dresses of ea	ach owner on on	ne or more continuation sheets)
Name Lindsey Ashby, for Loco Lease II	I, LLC		
Address Box 397, 1304 Main St		Phone	
City Georgetown	State <u>CO</u>		Zip <u>89444</u>
Owner Consent for Nomination (attach signed consent from each owner of	of property - :	see attached for	m)
Preparer of Nomination			
Name <u>George F Niederauer (for owner)</u>)	Date _	30 May 2014
Organization Durango Railroad Historica	al Society		
Address Box 654		Phone	
City <u>Durango</u>	State <u>CO</u>		Zip <u>81302</u>
FOR OFFICIAL USE:		Site Number	5AA.4139
5/20/2014 Nomination Received			
9/19/2014 Review Board Recommendation Approval Denial		9/25/2015	
		Listing Criteria	⊠A □B ⊠C □D □E
Certification of Listing: Vice-President of Preserva	ation Programs	s, HISTORY COLO	ORADO Date

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Property Name Deriver & Rio Grande Western Railroad Double Deck Stock Car No. 5564
SECTION II
Local Historic Designation
Has the property received local historic designation?
[X] no
[] yes []individually designated [] designated as part of a historic district
Date designated
Designated by (Name of municipality or county)
Use of Property
Historic Transportation: railroad
Current Historical display
Original Owner Denver & Rio Grande Railroad, then Denver & Rio Grande Western Railroad
Source of Information Robert Sloan, A Century + Ten of D&RGW Narrow Gauge Freight Cars,
1871–1981, 2nd ed. (BHI Publications: 2008); D&RGW rosters of equipment for various years (CO Railroad Museum)
Year of Construction Original 1903 / Rebuild 1926
Source of Information Victor Stone, Taking Stock, 1992; Robert Sloan, A Century + Ten of D&RGW
Narrow Gauge Freight Cars, 1871-1981, 2nd ed. (BHI Publications: 2008)
Architect, Builder, Engineer, Artist or Designer American Car & Foundry Company, St. Louis, MO
Source of Information Stone, Taking Stock; Sloan, A Century D&RGW Narrow Gauge Freight Cars
Locational Status
[] Original location of structure(s)
[X] Structure(s) moved to current location
Date of move from Colorado Railroad Museum (Golden) to Arboles in May 2014.
SECTION III

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 Denver & Rio Grande Western Railroad Double Deck Stock Car No. 5564				
SECTION IV				
Significance of Property Nomination Criteria				
	d with events that have made a sig	•		
[] B - property is connected	with persons significant in history	′		
[X] C - property has distinctive	ve characteristics of a type, period	I, method of construction or artisan		
[] D - property is of geograp	phic importance			
[] E - property contains the	possibility of important discoverie	s related to prehistory or history		
Areas of Significance				
 [] Agriculture [] Architecture [] Archaeology –	 [] Economics [] Education [X] Engineering [] Entertainment/ Recreation [] Ethnic Heritage [] Exploration/ Settlement [] Geography/ Community Identity [] Health/Medicine [] Industry [] Invention 	[] Landscape Architecture [] Law [] Literature [] Military [] Performing Arts [] Politics/ Government [] Religion [] Science [] Social History [X] Transportation		
Significance Statement (explain the significance of	the property on one or more conti	nuation sheets)		
one or more continuation sh	*			
SECTION V				
Locational Information				

USGS Topographic Quad Map Allison, 1954, NW 1/4 of Section 13, Twp 32N 6W, 37.023 - 107.454

Verbal Boundary Description of Nominated Property

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

Lot(s) N/A Block N/A Addition

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Property Name Denver & Rio Grande Western Railroad Double Deck Stock Car No. 5564

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

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
Property Type: [] building(s) [] district [] site [X] structure [] object [] area
Architectural Style/Engineering Type: Railroad stock car
Period of Significance: <u>1904-1926; 1904-1968</u>
Level of Significance: [X] Local [] State [] National
Multiple Property Submission:
Acreage
P.M. <u>NM</u> Township <u>32N</u> Range <u>6W</u> Section <u>13</u> Quarter Sections <u>NE NE NW</u>
UTM Reference: Zone 13 Easting 281803 Northing 281803 NAD83

Property Name Denver & Rio Grande Western Railroad Double Deck Stock Car 5564

DESCRIPTION and ALTERATIONS

DESCRIPTION

Denver & Rio Grande Railroad (D&RGW) Stock Car 5564 was built in 1904 to transport livestock and rebuilt in 1926. The car is 30' x 8' and has a wood frame of six longitudinal and two end sills reinforced by four wrought iron truss rods, each spanning two king posts on needle beams (cross members) bolted under the sills. The frame is supported by metal body bolsters, which are pinned to the truck bolsters. The body rides on two 4-wheel arch bar trucks with four coil springs at the ends of each truck bolster, made by American Steel and rated for 25-tons. The car is equipped with Westinghouse automatic air brakes and automatic knuckle couplers (Sloan, 2nd ed., pp. 90–91).

The wood body is built with walls of posts and diagonal braces, attached to sills at the bottom and plates at the top. Each diagonal wood brace has a 3/4" iron rod brace in the opposite direction, so the two braces form an X. The sides, except for door openings at the center, are covered with 5"- to 6"-wide horizontal boards (slats) spaced apart to provide ventilation for livestock. The slats are joined to the inside of the posts and braces in the car's lower half and outside in the top half. The end walls are solid.

At the center of each side is a sliding, slatted door approximately 5'-wide. To the left of the doors and just below the middle are two short boards between the inside slats for lettering that was done in that area of the car in the 1937 style (see Figure 1). In the same area but outside the posts and braces are two wide letter- and number boards that became part of the letter and number scheme beginning in about 1940. To the right of the door and above the middle are two short boards between the slats, with a painted bright black square, which covers a logo used for the Georgetown Loop Railroad. Centered at the top of the B (brake) end wall is a small solid door for loading long items such as lumber in off-season use. This door has a catch at top and is opened by being lowered between vertical metal guides. Floor planks, 1.75" shiplap, are nailed across the sills. A second floor, also with 1.75" shiplap planks, divides the car into two short stories. Many of the single layer wood roof boards and much of the running board and its blocks are missing and the remaining wood is highly deteriorated.

An iron stirrup step hangs from the sill at each corner of the car. At diagonally opposite corners iron rungs are evenly spaced directly above the steps and just around the corner on the end wall to facilitate access to the roof. The other two steps have iron handholds above them.

The car is painted a highly faded black with non-historic white lettering on both sides, probably dating from the mid 1970s when Ashby acquired the car, that partly, but inaccurately, reflects the style that was used from about 1940 to the end of operations in 1968, but without the so-called "flying Rio Grande" logo that was adopted in 1939. Large lettering to the left of the doors reads "G B & L/5564^D." The superscript D was used historically to indicate that the car is double deck. The non-historic "G B & L" stands for the fictitious Georgetown Breckenridge & Leadville RR that Lindsey Ashby, the current owner, painted on some of his cars. Along the bottom two slats of both sides are data for items such as capacity, length, dimensions, weight, retainer, and date and place rebuilt or repaired. On the sills are non-historic signs "KEEP OFF" and "GLRR"; the latter means Georgetown and Leadville Railroad, another name Ashby applied to his cars.

ALTERATIONS

Sources indicate that Stock Car 5564 was both a single deck and double deck car. It is unknown whether Stock Car 5564 started out as a single deck or double deck, but it was not uncommon to remove or replace decks as they deteriorated or the needs changed (Stone, p. 193; Kasprowicz).

Property Name Denver & Rio Grande Western Railroad Double Deck Stock Car 5564

Interstate Commerce Commission (ICC) regulations in 1911 required certain safety improvements: standardization in placement of running boards, handholds, ladders, steps, coupler unlocking bars, and other devices. Because D&RG lines crossed into New Mexico it was an interstate carrier and was required to implement ICC regulations within a certain period of time, which could be a few years if they affected hundreds of cars. For example, steps were required at all four corners, rather than two; spacing of step rungs was reduced from 20" to 16"; running board width was increased to 24" from previous 12" to 18"; uncoupling handles were moved to the outer edge of the car. These improvements were made on Stock Car 5564 in March 1914 (Stone, pp. 40, 87).

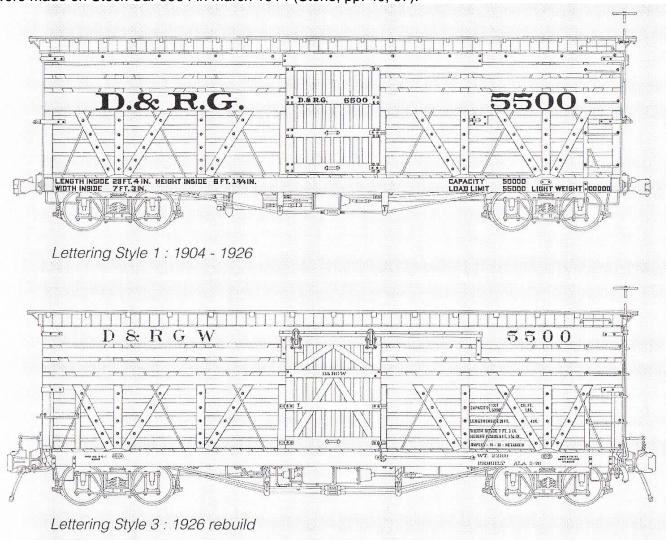


Figure 1. Drawings of the left side of Stock Car Series 5500–5849. TOP: as built and lettered in 1904. BOTTOM: as rebuilt and lettered in 1926, with the main data block on the boards to the right of the door providing, from top down: capacity in cubic feet and pounds; length, width and height inside, retainer type (air brake valve release settings), empty weight, rebuild location and date (Stone, p. 67).

Property Name Denver & Rio Grande Western Railroad Double Deck Stock Car 5564

In April 1926, Stock Car 5564 was in the D&RGW shops in Alamosa for general overhauling and rebuilding. The amount of work, especially replacement of all or part of the wood, depended on the condition of the car. A single boarded roof replaced the doubled boarded roof. Sheathing was removed from both ends. The original horizontal sliding door on the B end was changed to a vertical sliding door. The wide lettering boards just above the middle of each side were moved to the top. The wide board at the bottom on both sides was replaced with two smaller boards. The doors were strengthened with double chevron braces; this was done on some cars beginning in 1917, so it is possible that car 5564 received chevron braces earlier. Bolsters were reinforced. The paint was changed from Prince's Mineral Brown to black. White lettering was retained, but the style changed. The large lettering for the board at the top was a little smaller than original and the periods for the acronym were dropped. Car data that had been along the sills on both sides was now mostly on the lower boards to the right of the doors; this is the third of six lettering styles on stock cars. The car, as rebuilt, weighed about 22,200 pounds and was rated to carry 50,000 pounds in an interior space of 1310 cubic feet. (Stone, pp. 40, 87, 194)

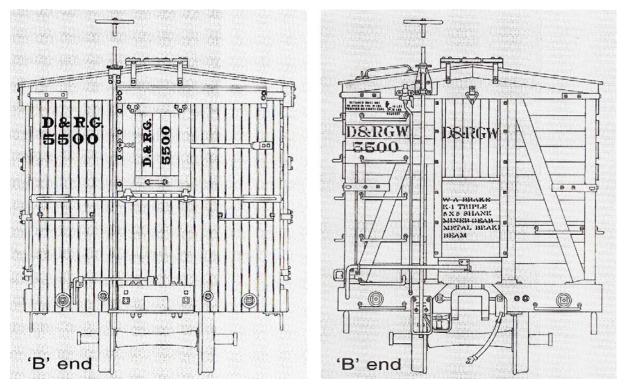


Figure 2. Drawings of the B end of Stock Car Series 5500–5849. LEFT: as built and lettered in 1904. RIGHT: as rebuilt and lettered in 1926. Sheathing and horizontal bar at left removed at right. Horizontal sliding door at left changed to vertical at right. (Stone, pp. 141, 153)

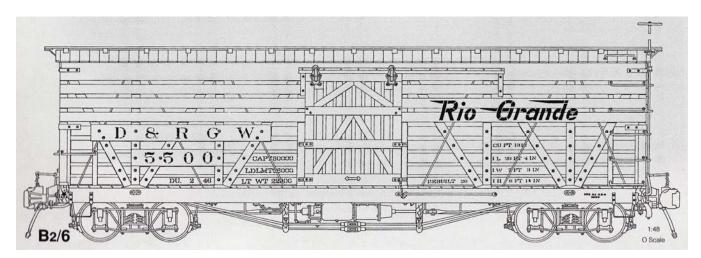


Figure 3. Drawing of the left side of Stock Car Series 5500–5849 as rebuilt in 1926 with the 1940s addition of separate letter and number signboards at left and the "flying Rio Grande" logo on the right. (Stone, p. 169)

In May 1937 a limited number of cars, including 5564, were painted with a new style of lettering that had the large "D & R G W/5564" painted on the slats on short filler boards that were added to create a solid panel in the area left of the doors on the inside of the posts and braces. This scheme was still on the car in the late 1940s (Stone, p. 136). In 1939 the railroad adopted a new logo, the so-called "flying Rio Grande," for all its cars. Frugality prevented the railroad from repainting all cars at once, so it is likely that car 5564 was not given the new logo until the late 1940s when the car was in the shop for maintenance. The large "flying Rio Grande" logo was added to the right sides of the door, above the data blocks, and a filler block was added so the logo spread over it and two slats, as shown in a photo at Chama in 1971 (Rhine). After the car was taken to Silver Plume, probably in 1975 when he bought it, Ashby replaced "D & R G W" with "G B & L" and the "flying Rio Grande" with a logo for the Georgetown Loop Railroad (Sloan, p. 205).

INTEGRITY

Stock Car 5564 is a good example of a double deck stock car that carried small livestock, mainly in the spring and fall seasons, on narrow gauge tracks throughout the mountainous southwest Colorado. Although D&RGW kept upgrading and modernizing its standard gauge lines from the 1930s onward, it aimed to abandon the narrow gauge lines. Narrow gauge equipment was neglected and maintenance was minimal. Thus, Stock Car 5564 retains a large degree of integrity in its original structural design and intactness of original materials and improvements made when rebuilt in 1926 and subsequent lettering board changes. The frame, draft gear, brakes and truck assemblies are in good condition. The one major lack of integrity is the roof, which needs a major restoration, probably reconstruction – like many narrow gauge stock cars, which have had their unprotected wood roofs exposed to weather for decades. Although the upper floor is intact, it has deteriorated from exposure, and will need to be restored and perhaps replaced. When the car is eventually to the Silverton Northern track in Silverton, with a potential to run on the Durango & Silverton Narrow Gauge Railroad track gives it a high degree of integrity in its association and setting, because double-deck stock cars were used throughout the D&RG lines and branches and leased at times to the Rio Grande Southern.

SIGNIFICANCE STATEMENT

D&RGW double deck Stock Car 5564 is locally significant under Criterion C for Engineering in 1904, when it was originally built, to 1926, when it was rebuilt. It is locally significant under Criterion A for Transportation from 1904 to 1968 for its service on the D&RGW narrow gauge lines and for its intermittent service on the Rio Grande Southern Railroad (RGS).

ENGINEERING

Stock Car 5564 was one of 350 Class 5 stock cars (30' long, 25-ton capacity) built in late 1904 and early 1905 by the American Car and Foundry Company of St. Louis for D&RG to replace old, smaller capacity cars not considered worth rebuilding to meet the new 1903 ICC requirements for safety upgrades. D&RG became D&RGW in 1921 upon reorganization and merging with the Rio Grande Western lines in Utah. Built lightly and open to the elements, stock cars had a shorter life span than other freight cars. Stock Car 5564 represents the culmination of evolution of D&RG stock cars from the thirty-two Class 1 stock cars that D&RG began building in 1873 in its Denver shops following a Billmeyer and Small (B&S) pattern, using B&S iron parts. These early cars were 26' long and could haul 8 tons on two sets of four-wheel trucks, advertised as transporting up to nine horses or thirteen cattle. The next advance was D&RG building 420 Class 2 and 3 stock cars with a capacity of 10 tons, but still 26' long, during the years from 1878 to 1882. Class 4 was a single 15-ton car built as a prototype in 1883, but never produced in quantity. These cars had spoked wheels, Westinghouse straight air brakes, link-and-pin couplers, no metal rod braces, and no small doors on the ends. Lettering was largely confined to the sills.

Following the Class 5 series, numbered 5500–5849, which included Stock Car 5564, the only advancement was in building slightly longer, 34' stock cars that still had a capacity of 25 tons as Class 6. The added length was so the cars could carry two stacks of 16' lumber. They used cast steel trucks made by Andrews rather than the arch bar trucks of prior classes. D&RGW built 100 of these cars in 1923 (Sloan, 2nd ed., pp. 85–86). Comparing narrow gauge stock cars to standard gauge stock cars built in the same period (1906) shows only a slight improvement in capacity for standard gauge cars: 30 tons and 37' long (D&RGW folio sheets).

Stock Car 5564 represents the culmination of development of narrow gauge stock cars over five decades from the small cars of the 1870s to the most common class of stock cars used on the D&RGW and RGS narrow gauge railroads in the twentieth century. It represents the period of construction in the nineteenth and early-twentieth centuries when rail car bodies were entirely made of wood bolted together, before steel started replacing wood in frames and bodies. In addition, it represents a specialization of livestock transport because the car had two floors, confining its use to small animals.

TRANSPORTATION

Development of the mining industry and general commerce in southwest Colorado would not have been possible on a large scale without the narrow gauge railroads built by General William Jackson Palmer (D&RGW), Otto Mears (Silverton Railroad [SRR], Silverton Northern Railroad [SN], and Rio Grande Southern [RGS]), and the Gold King Mining Company (Silverton Gladstone & Northerly [SG&N]).

With the success of mining, settlement and prosperity followed, and so did other industries, especially agriculture and livestock. Southwest Colorado was soon recognized as an important livestock region in the United States. Development of the livestock industry flourished because the region "offered an

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Property Name Denver & Rio Grande Western Railroad Double Deck Stock Car No. 5564

almost perfect climate with abundant forage, adequate water supply and a terrain that provided excellent protection against the elements" (Stone, p. 9). Stockyards were established in Denver in 1881 and grew to cover 105 acres by the turn of the century, handling about 40,000 head of cattle, horses, sheep and hogs daily. Major meat processing and packinghouse companies, such as Armour and Swift, were established near the yards, but Denver was mainly a trading point for much of the stock that was in transit from Colorado breeders and feeders to purchasers across the country. The Denver yards thrived through the first half of the twentieth century, peaking in the 1950s. Thus, D&RGW kept its narrow gauge stock cars in repair for a nearly full fleet of 450 cars (series 5500 and 5900) from the 1920s through the 1940s. A steep decline in hauling stock by rail began when the RGS was abandoned in 1952 and trucks began to dominate stock transport (Stone, pp. 9, 229; Sloan, p. 88).

The 5500 series stock cars were in service on the entire D&RGW and RGS narrow gauge circle (Salida, Gunnison, Montrose, Ridgway, Dolores, Durango, Chama [New Mexico], Antonito, Alamosa) with branches to Crested Butte, Ouray, Telluride, Silverton, Farmington (New Mexico), Pagosa Springs, and Santa Fe (New Mexico). As branches and parts of the circle were abandoned, the extent of the lines after 1955 shrunk to only the San Juan Extension (Alamosa to Chama [New Mexico] to Durango) and the branches to Silverton and Farmington (New Mexico). Exchanges of stock to standard gauge cars were performed at Montrose, Alamosa, and Salida (Stone, p. 229).

In the four corners region Durango had the largest capacity for stock cars at its stock pens: 40 cattle cars and 20 sheep cars. The capacity was 30 cattle or sheep cars in Mancos, 20 cattle and 10 sheep cars in Aztec, 5 cattle and 10 sheep cars in Farmington, and 2 cattle and 1 sheep cars in Silverton. When the stock cars were not being used seasonally for spring and fall moves of livestock, they would be stored on sidings or used to haul goods such as lumber (Stone, p. 231).

Stock cars such as D&RGW 5564 hauled livestock between mountain meadows and valley pastures and from ranches to markets as far away as Kansas City (via transfer to standard gauge lines). Narrow gauge railroads with their stock cars made the growth of the livestock industry economically viable through the first half of the twentieth century.

One-third of the 5500 series of stock cars were double deck, scattered through the sequence of numbers, and only a handful, including car 5564, were marked as both single and double deck cars, signifying a conversion at some time (Stone, p. 191).

In the 1950s the advent of modern highways and large livestock trucks made the narrow gauge railroads uncompetitive and caused a precipitous decline in livestock traffic. After several D&RGW tries at abandonment, the ICC finally allowed abandonment of the main line of the San Juan Extension and the Farmington branch in 1968. The Silverton Branch was saved because of the increased tourist traffic. In October and November 1955, twenty-five of series 5500 stock cars (not 5564) were converted to series 6700 idler flat cars for use in pipe trains for the oil boom in the Farmington, New Mexico, area that began in the 1950s (Stone, p. 45).

Stock car 5564 was retired in September 1970: one of a batch of 103 cars sold to the D&RGW dismantling contractor, American Compressed Steel Corporation of New Jersey. Lindsey Ashby bought the car in 1975 and moved it to Silver Plume, Colorado, for display when he began operating the Georgetown Loop Railroad. In about 2004 the car was moved to the Colorado Railroad Museum in Golden for storage and display. Ashby added non-historical lettering "KEEP OFF" to keep the public off for safety and "GLRR" to identify it as owned by him. In May 2014 the car was moved to San Juan Timberwrights, near Arboles, where it will reside until restoration work is completed (planned for 2015).

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then will be moved to the Silverton Northern (SN) track in Silverton.

A 1992 stock car study by Victor Stone found that almost 100 of the 350 series 5500 stock cars still survived into the 1990s, and about 60 percent were in private ownership. Subsequently, several privately owned cars were donated to the Cumbres & Toltec Scenic Railroad. Fewer remain today because cars left on sidings without protection are slowly rotting away. Stock Car 5564 is representative of double deck stock cars used on the narrow gauge until the end of narrow gauge railroads in southwest Colorado.

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BIBLIOGRAPHY

Ashby, Lindsay, Telephone conversation with George Niederauer, February 2014.

- Denver & Rio Grande Western Railroad Company, Folio sheets for certain standard gauge freight cars. D&RGW, Denver, 1909–1939 (in Colorado Railroad Museum collection).
- Grandt, Robert L., Editor, *Narrow Gauge Pictorial, Volume IV, Refrigerator Cars, Stock Cars, and Tank Cars of the D&RGW.* R. Robb. Oakland, California, 1985.
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- Sloan, Robert E., A Century + Ten of D&RGW Narrow Gauge Freight Cars, 1871 to 1981, 2nd ed. R.E. Sloan. Winona, Minnesota, 2008.
- Stone, Victor J., *Taking Stock: Narrow Gauge Stock Cars of the Denver & Rio Grande, 1873-1968.* Creedstone Publishing. Hampshire, England, 1992.

Property Name Denver & Rio Grande Western Railroad Double Deck Stock Car No. 5564

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

Currently, Stock Car 5564 is located on planks at San Juan Timberwrights, 60 Barton Circle, near Arboles. No real property is associated with this nomination.

Sketch Map Photo from Google with annotation by George Niederauer, July 2014.



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PHOTOGRAPH LOG

Name of Property: D&RGW stock car 5564

Location: Colorado RR Museum, Golden, Jefferson County & Arboles,

Archuleta County

Photographer: George F. Niederauer, Photos 1–4

Mike McDowell, Photo 5

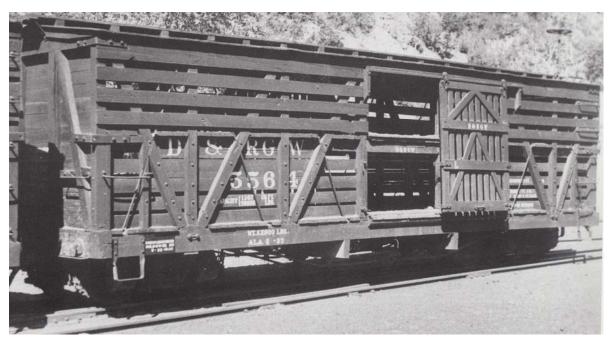
Date of Photographs: 7 May 2014, Photos 1–4

6 June 2014, Photo 5 Digital color TIF files on CD

Photo No. Photographic Information

- 1 Right side (referenced to A end as the front)
- 2 A end
- 3 Left side (referenced to A end as the front)
- 4 B end (location of hand brake)
- 5 Stock Car 5564 at San Juan Timberwrights in Arboles

HISTORIC PHOTOGRAPHS



1. D&RGW Stock Car 5564 in 1939, location not stated. Note 1937 style lettering, which Stone says "only a limited number of cars appear to have received this application" (Stone, p. 136).



2. D&RGW Stock Car 5564 with "flying Rio Grande" logo in Chama on August 18, 1971. Photo by Stanley Rhine.

USGS TOPOGRAPHIC MAP

Quadrangle, Colorado 7.5 Minute Series

Allison Quadrangle, 7.5 minute, 1954

