

HISTORY COLORADO

COLORADO STATE REGISTER OF HISTORIC PROPERTIES NOMINATION FORM

SECTION I

Name of Property

Historic Name Denver & Rio Grande Western Railroad Single Deck Stock Car 5627

Address of Property

[] address not for publication

Street Address 5395 County Road 223

City Bayfield County La Plata Zip 81122

Present Owner of Property

(for multiple ownership, list the names and addresses of each owner on one or more continuation sheets)

Name Randy Babcock

Address 5395 County Road 223 Phone _____

City Bayfield State CO Zip 81122

Owner Consent for Nomination

(attach signed consent from each owner of property - see attached form)

Preparer of Nomination

Name George F Niederauer (for owner) Date 30 May 2014

Organization Durango Railroad Historical Society

Address Box 654 Phone _____

City Durango State CO Zip 81302

FOR OFFICIAL USE:

Site Number 5LP.10644

5/30/2014 Nomination Received

9/19/2014 Review Board Recommendation
 Approval Denial

9/25/2015 HC Board State Register Listing
 Approved Denied

Listing Criteria A B C D E

Certification of Listing: Vice-President of Preservation Programs, HISTORY COLORADO

Date

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SECTION II

Local Historic Designation

Has the property received local historic designation?

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; Sloan, *A Century + Ten of D&RGW*

Narrow Gauge Freight Cars, 1871-1981, 2nd ed.

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)

Structure(s) moved to current location

Date of move Moved from Durango & Silverton track (Durango) to current location in Bayfield in 2009.

SECTION III

Description and Alterations

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

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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
- D** - property is of geographic importance
- E** - property contains the possibility of important discoveries related to prehistory or history

Areas of Significance

- | | | |
|---|--|--|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Economics | <input type="checkbox"/> Landscape |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Education | <input type="checkbox"/> Architecture |
| <input type="checkbox"/> Archaeology – prehistoric | <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Law |
| <input type="checkbox"/> Archaeology – historic | <input type="checkbox"/> Entertainment/ Recreation | <input type="checkbox"/> Literature |
| <input type="checkbox"/> Art | <input type="checkbox"/> Ethnic Heritage | <input type="checkbox"/> Military |
| <input type="checkbox"/> Commerce | <input type="checkbox"/> Exploration/ Settlement | <input type="checkbox"/> Performing Arts |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Geography/ Community Identity | <input type="checkbox"/> Politics/ Government |
| <input type="checkbox"/> Community Planning and Development | <input type="checkbox"/> Health/Medicine | <input type="checkbox"/> Religion |
| <input type="checkbox"/> Conservation | <input type="checkbox"/> Industry | <input type="checkbox"/> Science |
| | <input type="checkbox"/> Invention | <input checked="" type="checkbox"/> Social History |
| | | <input checked="" type="checkbox"/> Transportation |

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) N/A Block N/A Addition _____

USGS Topographic Quad Map Gem Village, 1968, NW ¼ of Section 7, Twp 34N 7W, 37.232N, 107.686W

Verbal Boundary Description of Nominated Property

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

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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: 1904-1926; 1904-1968

Level of Significance: [X] Local [] State [] National

Multiple Property Submission: n/a

Acreage n/a

P.M. NM Township 34N Range 7W Section 7 Quarter Sections NW SW NW

UTM Reference: Zone 13 Easting 261715 Northing 4124011 NAD83

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DESCRIPTION and ALTERATIONS

DESCRIPTION

The Denver & Rio Grande Railroad (D&RGW) single deck Stock Car 5627 was built in 1904 to transport larger farm animals, such as cattle and horses, and rebuilt in 1926. The car is 30' long and 8' wide 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 the animals. The slats are inside the posts and braces in the bottom half and outside in the top half. The end walls are solid. At the center of each side is a sliding, slatted door about 5'-wide. 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. Nearly all the single layer wood roof is missing or highly deteriorated. The roof is covered with non-historic corrugated sheet metal to help protect the car. The running board and its blocks are missing.

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 black with white lettering on all sides that is largely historic to the early 1930s, before the so-called "flying Rio Grande" logo was adopted by D&RGW. The lettering consists of large "D&RGW" and "5627" on both sides and smaller "D&RGW/5627" in the upper left corners of the ends. At the bottom right of both sides are data for items such as capacity, length, dimensions, weight, retainer, and date and place rebuilt or repaired.

ALTERATIONS

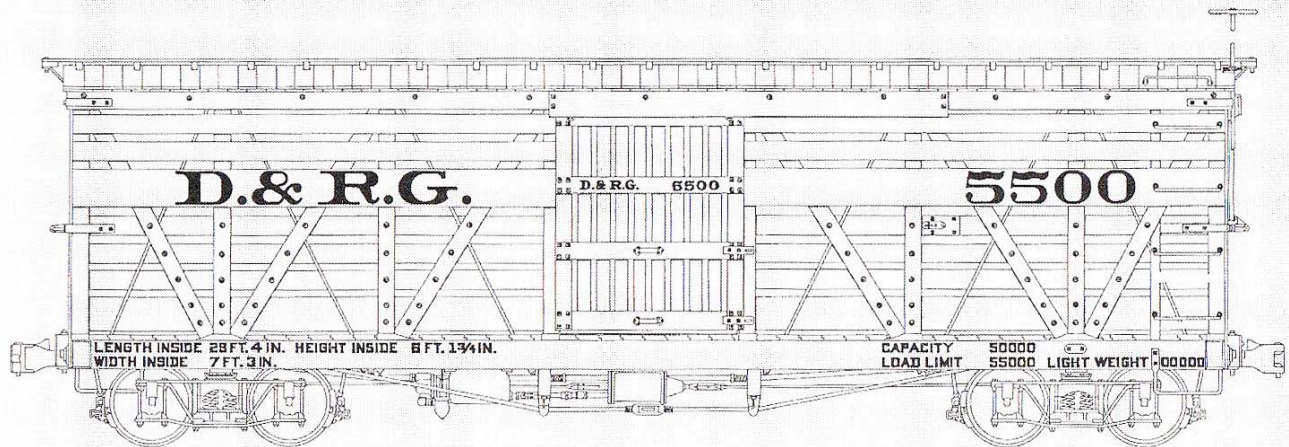
Interstate Commerce Commission (ICC) regulations in 1911 required certain safety improvements: standardization in placement of running boards, handholds, ladders, steps, coupler unlocking bars, and other devices. Because D&RG lines crossed into New Mexico it was an interstate carrier and was required 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 5627 in August 1913 (Stone, pp. 40, 93).

In May 1926, Stock Car 5627 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 horizontal sliding door on the B end was changed to a vertical sliding door. The wide

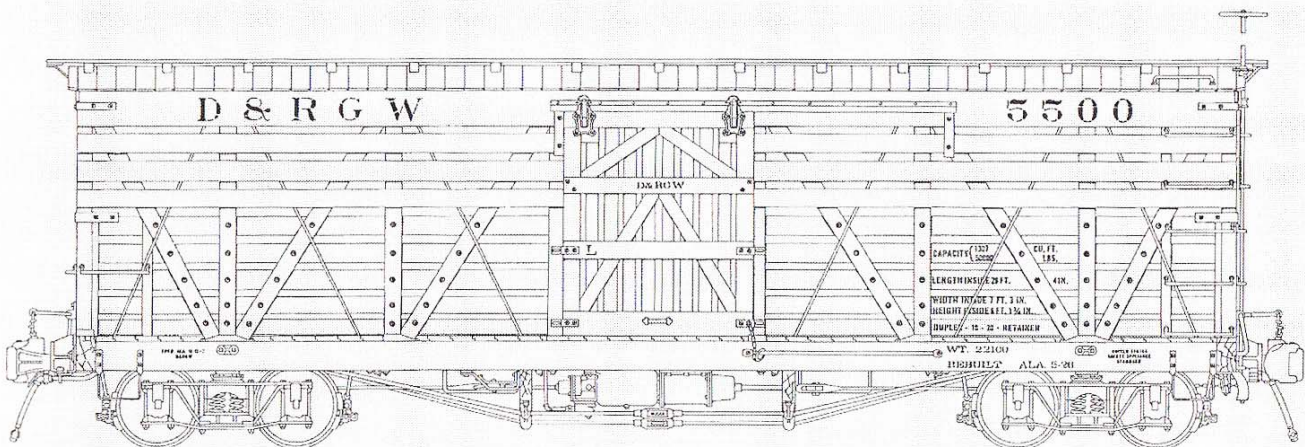
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lettering boards just above the middle of each side were moved to the top. The wide board at the bottom on both sides was replaced with two smaller boards. The doors were strengthened with double chevron braces; this was done on some cars beginning in 1917, so it is possible that car 5627 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 were dropped. Car data that had been on 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, 93, 194).

In 1939 the railroad adopted a new logo, the so-called "flying Rio Grande," for all its cars. Frugal D&RGW was slow to repaint cars, but sometime after 1939, probably 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.



Lettering Style 1 : 1904 - 1926



Lettering Style 3 : 1926 rebuild

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).

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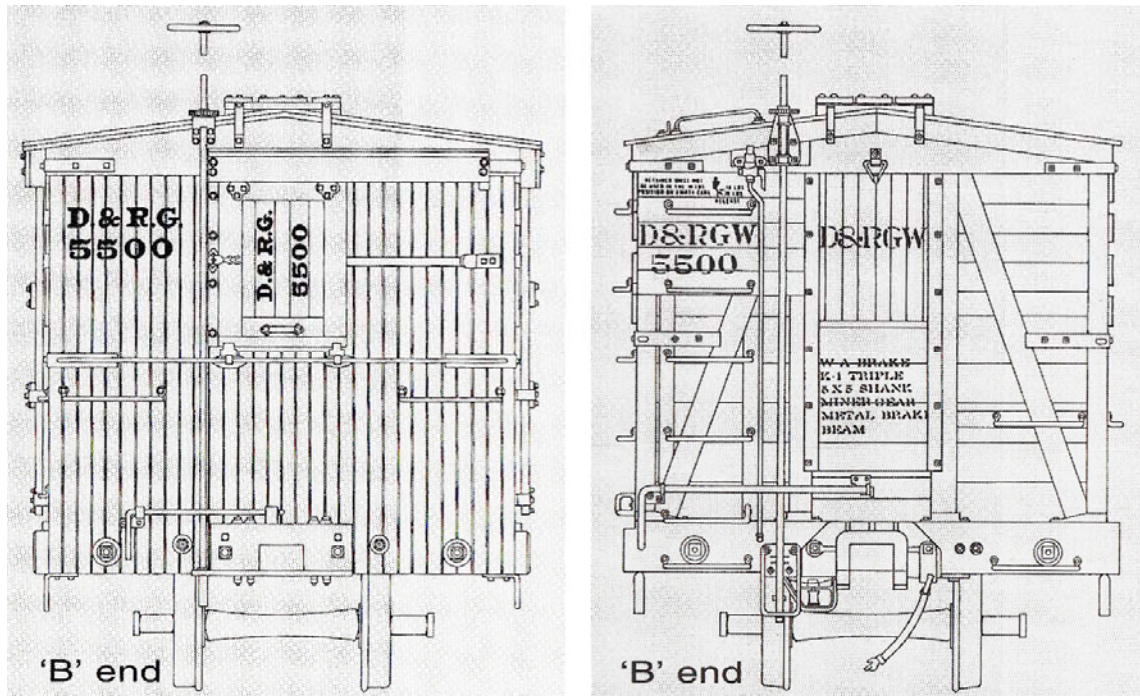


Figure 2. Drawings of the B end of Stock Car Series 5500–5849. LEFT: as built and lettered in 1904. RIGHT: as rebuilt and lettered in 1926. Sheathing and horizontal bar at left removed at right. Horizontal sliding door at left changed to vertical at right (Stone, pp. 141, 153).

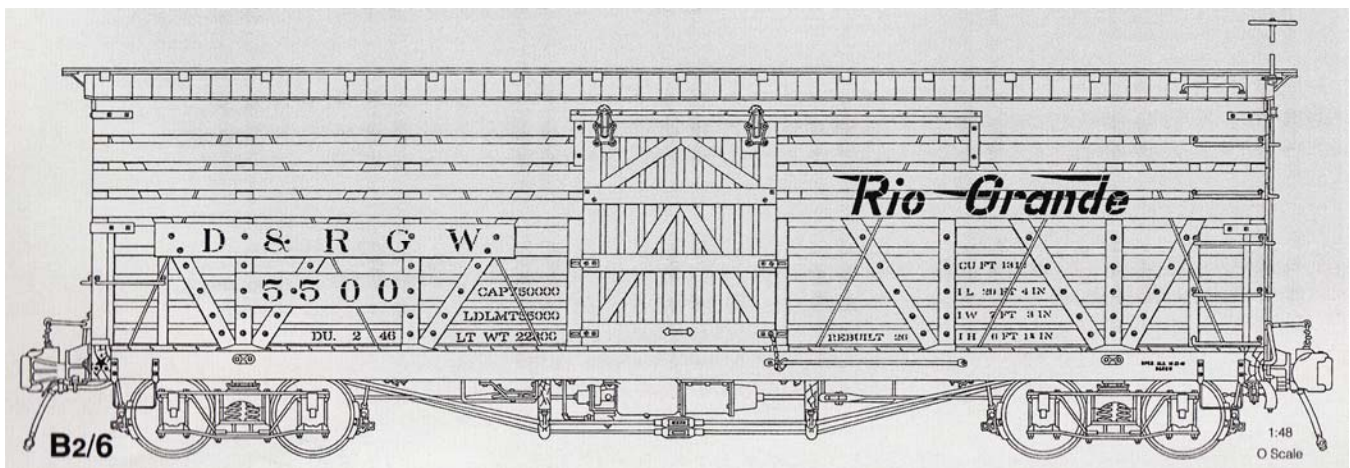


Figure 3. Drawing of the left side of Stock Car Series 5500–5849 as rebuilt in 1926 with the 1940s addition of separate letter and number signboards at left and the “flying Rio Grande” logo on the right. (Stone, p. 169).

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A 1980s survey of the car found that the lettering had been changed to a combination of Styles 4 and 6. Style 4 was implemented in 1937 and moved the large "D&RGW" and "5627" from the top board to three boards left of the doors, with "D&RGW" on the center board and "5627" just below it. Adding the "flying Rio Grande" logo on the right of doors was part of Style 6. That left the "D&RGW/5627" on the existing three slats rather than adding a new layer of short, wider boards for the lettering (Stone, p. 138, 193).

When Randy Babcock, the current owner, acquired the car from the Durango & Silverton Narrow Gauge Railroad (D&S) in 2009, he found it in bad shape. The roof was almost completely gone or deteriorated so he removed the remaining running board and the brake wheel and shaft, then added corrugated metal as a temporary roof. He replaced some damaged and missing boards, then repainted the car and added lettering that is substantially what had been used in 1926 on the sides, but a more simple variation on the ends not seen in Stone's book.

INTEGRITY

Stock Car 5627 is a typical example of a single deck stock car that carried livestock in the spring and fall seasons and other goods, such as lumber, in the off 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 5627 retains a large degree of integrity in its original structural design and intactness of original materials and improvements made when rebuilt in 1926. The frame, draft gear, and brakes are in good condition, and the truck assemblies are in very good condition. The one major lack of integrity is the roof, which needs replacing, like many narrow gauge stock cars, which have had their unprotected wood roofs exposed to weather for decades. Although the floor is intact, it, too, is badly deteriorated from exposure. When the car is eventually moved to the Silverton Northern track in Silverton, the potential to run on the Durango & Silverton Narrow Gauge Railroad track gives it a high degree of integrity in its association and setting, because single-deck stock cars were used throughout the D&RG lines and branches and leased at times to the Rio Grande Southern.

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SIGNIFICANCE STATEMENT

D&RGW single deck Stock Car 5627 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, including its intermittent service on the Rio Grande Southern Railroad from 1904 to 1952.

ENGINEERING

Stock Car 5627 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 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 5627 represents the culmination of evolution of D&RG stock cars from the 32 Class 1 stock cars that D&RG began building in 1873 in its Denver shops to a Billmeyer and Small (B&S) pattern, using B&S iron parts. They 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 5627, the only advancement was in building slightly longer, 34-ft, 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 5627 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.

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

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the United States. Development of the livestock industry flourished because the region “offered an almost perfect climate with abundant forage, adequate water supply and a terrain that provided excellent protection against the elements.” 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 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 5627 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 livestock industry economically viable through the first half of the twentieth century.

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 5627) 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 5627 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. Its history between 1970 and 1981 is unknown. In about 1981 it was acquired by the Durango & Silverton Narrow Gauge Railroad (D&SNG) and used to haul horses into the Animas Canyon. In 2009 Randy Babcock acquired the car and moved it to his lot near Bayfield for display.

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 5627 is

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representative of single deck stock cars used on the narrow gauge until the end of narrow gauge railroads in southwest Colorado.

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BIBLIOGRAPHY

Babcock, Randy, Conversations 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.

Norwood, John B. *Rio Grande Narrow Gauge Recollections*. River Forest, Illinois, Heimburger House Publishing, 1986.

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.

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GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

Currently, Stock Car 5627 is located on a short piece of track at 5395 CR 223, a few miles west of Bayfield. 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 5627
Location: 5395 CR 223, Bayfield, La Plata County
Photographer: George F. Niederauer
Date of Photographs: 29 May 2014
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)

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HISTORIC PHOTOGRAPHS



1. Stock Car 5627 (front and center) in Durango, October 2, 1947. Note the different lettering schemes on the cars. Photo by Otto Perry (Norwood, pp. 178–179).

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USGS TOPOGRAPHIC MAP

Quadrangle, Colorado
7.5 Minute Series

Gem Village Quadrangle, 7.5 minute, 1968

