## HISTORY COLORADO

## COLORADO STATE REGISTER OF HISTORIC PROPERTIES NOMINATION FORM

## SECTION I

## Name of Property

Historic Name Denver \& Rio Grande Western Railroad Flatcar No. 6215
Other Names $\qquad$

## Address of Property

[ ] address not for publication
Street Address Silverton Northern track on Cement Street between 7th and 10th streets
City Silverton
County San Juan
Zip 81433

## Present Owner of Property

(for multiple ownership, list the names and addresses of each owner on one or more continuation sheets)
Name Lindsey Ashby, for Loco Lease II, LLC
Address Box 397, 1304 Main St
$\qquad$ Phone $\qquad$
City Georgetown State CO Zip 89444

## 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 $\qquad$
City Durango State CO Zip 81302

FOR OFFICIAL USE:
5/30/2014
$\qquad$ Review Board Recommendation $\boxtimes$ Approval $\square$ Denial

Site Number 5SA. 1527
9/25/2015

Listing Criteria $\boxtimes \mathrm{A} \quad \square \mathrm{B} \quad \boxtimes \mathrm{C} \quad \square \mathrm{D} \quad \square \mathrm{E}$

## COLORADO STATE REGISTER OF HISTORIC PROPERTIES

## Property Name Denver \& Rio Grande Western Railroad Flatcar No. 6215

## 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 $\qquad$
Designated by $\qquad$ (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 February 1918 / Rebuild 1937

Source of Information 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 Denver \& Rio Grande Railroad
Source of Information Sloan, A Century + Ten of D\&RGW Narrow Gauge Freight Cars, 1871-1981

## Locational Status

[ ] Original location of structure(s)
[X] Structure(s) moved to current location Date of move Moved from Colorado Railroad Museum (Golden) to Silverton 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)

## SECTION IV

## Significance of Property

## Nomination Criteria

[X] A - property is associated with events that have made a significant contribution to history
[ ] B - property is connected with persons significant in history
[X] 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

[ ] Agriculture
[ ] Architecture
[ ] Archaeology prehistoric
[ ] Archaeology historic
[ ] Art
[ ] Commerce
[ ] Communications
[ ] Community Planning and Development
[ ] Conservation
[ ] 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 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 Silverton, 1955, SW $1 / 4$ of Section 17, Twp 35N 9W, 37.8074-107.6643

## Verbal Boundary Description of Nominated Property

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

Property Name_Denver \& Rio Grande Western Railroad Flatcar No. 6215

## 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: $\qquad$
Period of Significance: 1918-1937; 1918-1968
Level of Significance: [X] Local [ ] State [ ] National
Multiple Property Submission: n/a

Acreage $\qquad$
P.M. NM Township 41N Range 7W Section 17 Quarter Sections SE NW SW

UTM Reference: Zone 13 Easting 265458 Northing 4187799 NAD83

Property Name Denver \& Rio Grande Western Railroad Flatcar No. 6215

## DESCRIPTION and ALTERATIONS

## DESCRIPTION

Denver \& Rio Grande Western Railroad (D\&RGW) Flatcar 6215 was originally built by the railroad in February 1918 and rebuilt in 1937. The car is 36 ' long x 7 '-6" wide (at the deck) and has a composite frame of six longitudinal and two end sills held in tension by four wrought iron truss rods running end to end and spanning queen posts on two needle beams (cross members) under the car - typical of woodframe freight cars. The composite frame is made up of wood timbers with 8 " $\times 6^{\prime \prime}$ angle irons reinforcing the inside of the two center sills and the outside of the two side sills. The frame is supported by cut down standard gauge cast iron body bolsters, which are pinned to the truck bolsters. The body rides on two 4-wheel arch bar trucks with eight springs (four double coils) at the ends of each truck bolster. The car weighs about 23,800 pounds and is rated to carry 30 tons (Sloan, 2nd ed., p. 108).

The deck is made of 1.75 " shiplap planks spiked to the sills. Nine cast steel stake pockets are bolted to each side sill. Iron strap steps are bolted to the end of each side sill and have grab irons (hand holds) just above them and just around the corner on the end sills. The brake wheel shaft extends from the stirrup bolted to the B end sill to the brake wheel about one foot above the end sill. The car has Westinghouse automatic air brakes with brake cylinders and Farlow draft gear made from surplus standard gauge cars. It is equipped with automatic knuckle couplers (Conder, p. 5, 28).

The car has traces of red iron oxide paint and white lettering. The right sill is clearly marked with large white letters towards the B end that read "G B \& L" and the number 6215. The non-historic "G B \& L" stands for the fictitious Georgetown Breckenridge \& Leadville RR that Lindsey Ashby, the current owner, painted on this car when he purchased it in the mid 1970s. The left sill has a faded number 6215 and letters GLRR, which stands for the fictitious Georgetown \& Leadville RR that Lindsey Ashby also painted on some of his cars.

## ALTERATIONS

When originally built as one of ten flatcars in Class 21, Flatcar 6215 was 34 ' long with a frame entirely of wood. D\&RG became D\&RGW in 1921 upon reorganization and merging with the Rio Grande Western lines in Utah. The air brake gear, body, truck bolsters, and trucks were the usual narrow gauge types. The car weighed 16,800 pounds and was rated to carry 20 tons. It was painted red with iron oxide and lettered in white with "D \& R G" and "6215" in large letters and car data in small letters along the side sills.

In 1937 D\&RGW rebuilt the car, extending the length two feet and adding large 8 " $\times 6$ " angle irons to the center and side sills and other metal bracing to strengthen it. The 20 -ton arch bar trucks with a 3'-7" wheelbase were replaced by 30 -ton arch bar trucks with a $4^{\prime}-8$ " wheelbase. Surplus standard gauge air brake cylinder, Farlow draft gear, draft sills, and cut-down body bolsters replaced the respective usual narrow gauge gear. After rebuilding the car weighed 23,800 pounds due to the increase in materials.

When Lindsey Ashby began operating the Georgetown Loop Railroad, the car was moved to Silver Plume, Colorado, in the mid 1970s for general use. He added the "G B \& L" lettering. In about 2004 the car was moved to the Colorado Railroad Museum in Golden for storage and display; at that time the flat car held the frame, cylinders and leading truck of a disassembled locomotive.

Property Name Denver \& Rio Grande Western Railroad Flatcar No. 6215

Flatcar 6215 is a typical example of a 6200 series flatcar after it was rebuilt. 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, Flatcar 6215 retains a high degree of integrity in its original structural design and later improvements, and intactness of materials. It has been used hard and not maintained, so the two end sills and probably the decking, will have to be replaced, then painted and lettered in a 1937 style. Having moved the car to the Silverton Northern track 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 6200 series flat cars were used throughout the D\&RG, later D\&RGW, lines and branches.


Drawing of Flatcar 6215 as built in 1918 by D\&RGW; lettering is not shown (Sloan, p. 115).


Drawing of Flatcar 6215 after the 1937 rebuild by D\&RGW. The B end shows the brake shaft and the brake wheel a shorter distance above the sill; lettering is not shown (Sloan, p. 116).

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D\&RGW Flatcar 6215 is locally significant under Criterion C for Engineering from 1918, when it was originally built as the second-to-last classes of wood frame flatcars to 1937 when it was rebuilt into a longer, stronger flatcar - a transitional car with a composite wood/steel frame. It is also locally significant under Criterion A for Transportation from 1918 to 1968 for its service as a revenue car.

## ENGINEERING

Flatcar 6215 was one of twenty flatcars D\&RGW built in 1918. They all were of the same 34 '-long design but were divided into two classes: Class 20 (6200-6209) had trucks rated for 25 -ton capacity and Class 21 (6210-6219) had trucks rated for 20-ton capacity. Both classes were rebuilt in 1937 to handle 30 -ton loads on 36 '-long decks.

In nearly a century of narrow gauge, D\&RGW generated 28 classes of flatcars - more variety than any other of its narrow gauge cars. In 1871 Billmeyer and Small (B\&S) of York, Pennsylvania, built ninety Class 1 wood cars that were 17 ' long, weighed 4000 pounds, hauled 5 tons on 4 wheels in pedestals, and had hand brakes but no air brakes. B\&S built one smaller car, 14' long, perhaps only as a sample. The first significant development came only a year later, when B\&S built seventy-five Class 3 cars 23'7" long and carrying 8 tons on two 4 -wheel trucks with brakes on one truck. In 1872 D\&RG began installing straight air brakes on its freight cars; for flatcars it started with the last 35 of the 135 Class 4 cars. The next step came with 26 '-long cars that could carry 10 tons, Classes 5 and 7-10, built from 1878 to 1880. Cars built for 10-ton capacity but 30' long were built as Classes 11-15 during 18801881. Also in 1881 D\&RG built 30'-ft cars with 15-ton capacity in Classes 16-18. Thus, in its first decade D\&RG narrow gauge flatcars tripled in capacity and nearly doubled in length.

In 1903 and soon thereafter cars considered worth maintaining were improved by replacing link-and-pin couplers with automatic knuckle couplers and replacing straight air brakes with automatic air brakes to meet the 1903 Interstate Commerce Commission (ICC) safety requirements.

The next stage of development saw 20-ton capacity cars, still 30' long, appearing as Class 19 in 1887 and Class 21 (including Flatcar 6215) in 1918, when 25 -ton Class 20 flatcars were also built. The next jump was the Class 22 cars built in 1926 as 40 ' long and carrying 30 tons. These were the last of the wood frame cars; they proved too weak. Class 20 and 21 cars were rebuilt in 1937 with composite wood/steel frames. Class 22 cars were reinforced in 1937 by attaching rails to the bottom of the side sills with U-bolts.

The steel revolution came to narrow gauge flatcars in 1940 when forty-five Class 23 ( 6500 series) so-called "fishbelly" flatcars were produced. The fishbelly name came from the shape of the outer sills that dropped down between the trucks. They were able to carry a 40-ton load on 42 ' long decks. Per an ICC requirement, cast trucks were used instead of arch bar trucks. These were the largest flatcars used on the D\&RGW narrow gauge lines (Sloan, pp. 105-110).


# COLORADO STATE REGISTER OF HISTORIC PROPERTIES CONTINUATION SHEET 

Property Name Denver \& Rio Grande Western Railroad Flatcar No. 6215

Drawing of steel frame "fishbelly" flatcar series 6500 originally built as standard gauge cars in 1907 by American Car \& Foundry of St. Louis and converted to narrow gauge by D\&RGW in Alamosa beginning in 1940; lettering is not shown (Sloan, p. 118).

Flatcar 6215 represents the period of construction in the 19th and early-20th centuries when rail cars were entirely wood, before riveted steel replaced bolted wood. It represents the culmination of the development of wood narrow gauge flatcars and revealed the limit for wood construction. Its rebuild with a composite wood/steel frame in 1937 began the transition to steel frame narrow gauge flatcars that came in 1940.

## 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\&RG), 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]).

Initially, the most important use of flatcars was in constructing the railroad. Flatcars hauled rails, ties, bundles of tie plates and joiners, kegs of rail spikes, and tools; the open decks were handy and made work efficient. In the initial twelve years of rapid railroad building D\&RG flatcars increased in number to reach a peak of 1424 in 1883, then rapidly dropped to 312 in 1903. The Rio Grande Southern Railroad (RGS) bought 100 of D\&RG's flatcars in 1891, when it was building RGS from Ridgway to Durango. D\&RG disposed of cars considered not worth the expense of upgrading to 1903 ICC safety requirements, dropping the number to 76 in 1905. Flatcars wore out more rapidly than other freight cars, with the exception of stock cars. Demand for more durable cars led to replacement of the earlier cars with ones that were increasingly longer, heavier, and sturdier. As a result of World War II and the post-war oil and gas boom, the inventory of cars grew to over 160.

From early on, some flatcars had sides added to them to become gondolas; conversely, some gondolas and boxcars had their superstructure removed to become flatcars. These changes were made as demands for the type of transportation warranted them. Some flatcars would be converted to gravel spreaders, water and oil tank cars, and work cars, such as materials cars, wrecking cars, rail and tie cars, and boom cars for derrick cars. Some would form the base for several kinds of work equipment, such as a derrick car and a pile driver. Some later flatcars were made from cut down standard gauge flatcars because they were sturdier. In 1955 two fishbelly flatcars had bulkheads added to the ends to haul wallboard for the booming housing market in the Farmington, New Mexico area. In addition, the gas and oil boom in Farmington in the 1950s increased the demand for strong flatcars (conversions of standard gauge boxcars and stock cars and narrow gauge gondolas) and idler flatcars (conversions of narrow gauge box and stock cars) placed between the flatcars to carry pipes longer than the cars. Gondolas, boxcars, and stockcars were cut down to make flatcars. The converted cars added to the number of flatcar classes (Sloan, pp. 105-112).

Flatcar 6215 could have hauled diverse goods and products into and out of the mountains and valleys of southwest Colorado. D\&RGW would have used them to haul ties and rails for track maintenance. For the lumber industry they would have hauled logs, poles, timbers and lumber. All kinds of large mining, construction, industrial, and agricultural equipment would be transported on flats, as would automobiles and trucks. They also hauled loads of stone.

Property Name Denver \& Rio Grande Western Railroad Flatcar No. 6215

Flatcar 6215 was in service until the end of D\&RGW operations in 1968 and was sold to the scrapper Floyd Reed in Alamosa probably that year. Lindsey Ashby apparently purchased Flatcar 6215 in 1973 and moved it to Silver Plume for use on the Georgetown Loop Railroad. He kept the number but changed the car lettering from "D\&RGW" to "GB\&L" in honor of Georgetown, Breckenridge, and Leadville Railroad. In about 2004 the car was moved to the Colorado Railroad Museum (CRRM) in Golden for storage. In May 2014 the car was moved to the Silverton Northern track along Cement Street in Silverton as a favor to CRRM, which needed the space, and to Ashby, who is reserving the car for future purchase by DRHS.

Flatcar 6215 is significant to transportation because it represents the class of wood and composite frame flat cars used on the D\&RGW narrow gauge from 1918 until the end of narrow gauge operations in 1968 to support both the maintenance of the railroad and the hauling of equipment, goods, and materials in support of commerce. It is one of perhaps only ten series 6200 flatcars still existing. (Sloan, p. 108, lists the disposition of nine cars; however, two of these have the same number, and Flatcar 6215 is not in his list. He also said that ten of the cars still existed in 1967).

Property Name Denver \& Rio Grande Western Railroad Flatcar No. 6215

## BIBLIOGRAPHY

Ashby, Lindsey, Telephone conversation with George Niederauer, February 2014.
Conder, Mike, and Tim Mulina, Denver \& Rio Grande Western Narrow Gauge 6200-6219 Series Flatcars. O'Fallon, MO, BHI Publications, 2003.

Conway, Chuck, Email to George Niederauer, January 31, 2014.

Grandt, Robert L., Editor, Narrow Gauge Pictorial, Vol. III, Gondolas, Boxcars, and Flatcars of the D\&RGW. Oakland, California, R. Robb, 1984.

Sloan, Robert E., A Century + Ten of D\&RGW Narrow Gauge Freight Cars, 1871 to 1981, 2nd ed. Winona, Minnesota, R.E. Sloan, 2008.

## GEOGRAPHICAL DATA

## Verbal Boundary Description

Flatcar 6215 - large asterisk in the image below - is located on the Silverton Northern (SN) track in Silverton within the Cement Street right of way between 7th and 10th streets - labeled in red in the image below. No real property is associated with this nomination.

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


Property Name Denver \& Rio Grande Western Railroad Flatcar No. 6215

## PHOTOGRAPH LOG

Name of Property: D\&RGW flatcar 6215<br>Location: Colorado RR Museum, Golden, Jefferson County \& Silverton, San Juan County

Photographer: George F. Niederauer for photos 1-4
Jerry Hoffer for photo 5
Date of Photographs: 7 May 2014 for photos 1-4
15 June 2014 for photo 5
Digital color on CD

Photo No Photographic Information

1 Right side (referenced to A end as the front). Note: load on car is not part of nomination.
2 A end
3 Left side (referenced to A end as the front). Note: load on car is not part of nomination.
4 B end (location of hand brake)
5 Flat Car 6215 (at left) on the Silverton Northern track in Silverton

## HISTORIC PHOTOGRAPHS



1. Flatcar 6215 in Chama on 11, 1968. The load on the car is a tank from a locomotive tender. An extra wheel set sits at left under the end of the flatcar. Photo by Russell T. Sharp (Conway).

## Property Name Denver \& Rio Grande Western Railroad Flatcar No. 6215

## USGS TOPOGRAPHIC MAP

Quadrangle, Colorado
Silverton Quadrangle, 7.5 minute, 1955
Flatcar 6215 is on the display track that is marked with the dot on the map below.


