UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

RECEIVED

APR 2 9 1975

DATE ENTERED MAY 1 2 1975

SEE IN	NSTRUCTIONS IN <i>HOW T</i> TYPE ALL ENTRIES (<i>O COMPLETE NATIONA</i> COMPLETE APPLICABL		S	
NAME					
HISTORIC TO DO	RGW Engine # 463	/namman, «anuma e	term legemeti	wo)	
EX-D&	"." 403	(narrow gauge s	ceam rocomoci		
	e # 463	and the second s	es electric		
LOCATION			-		
STREET & NUMBER					
		NOT FOR PUBLICATION			
city, town Antoni	to	. VICINITY OF	congressional district 3rd		
STATE Colorado		CODE	COUNTY	CODE	
		08	Conejos	021	
CLASSIFIC	ATION				
CATEGORY	OWNERSHIP	STATUS	PRESENT USE		
DISTRICT	X PUBLIC	OCCUPIED	AGRICULTURE	X MUSEUM	
BUILDING(S)	PRIVATE	UNOCCUPIED	COMMERCIAL	PARK	
STRUCTURE	_BOTH	XWORK IN PROGRESS	EDUCATIONAL	PRIVATE RESIDEN	
SITE	PUBLIC ACQUISITION	ACCESSIBLE	ENTERTAINMENT	RELIGIOUS	
X_OBJECT	IN PROCESS	X_YES: RESTRICTED	GOVERNMENT	SCIENTIFIC	
	BEING CONSIDERED	YES: UNRESTRICTEDNO	INDUSTRIAL MILITARY	XTRANSPORTATIONOTHER:	
•	PROPERTY				
Town	of Antonito				
STREET & NUMBER TOWN	Hall				
city, town Anto			STATE		
		VICINITY OF	Colorad		
LOCATION	OF LEGAL DESCR		252, page 10 p.m., January		
COURTHOUSE. REGISTRY OF DEEDS, E	TC Conejos County	Courthouse			
STREET & NUMBER					
CITY, TOWN	Conejos		STATE		
			Colorade	o ————	
REPRESEN'	TATION IN EXIST	ING SURVEYS			
TITLE					
DATE					
		FEDERALS	TATE _COUNTY _LOCAL		
DEPOSITORY FOR SURVEY RECORDS					
CITY, TOWN			STATE	· · · · · · · · · · · · · · · · · · ·	



CONDITION

CHECK ONE

CHECK ONE

__EXCELLENT

__DETERIORATED

__UNALTERED

X__ALTERED

_ORIGINAL SITE

DATE____

__MOVED

X_FAIR

__RUINS __UNEXPOSED

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Engine # 463 is a medium sized, three foot narrow gauge steam locomotive. She was built in 1903 by the Baldwin Locomotive Works of Philadelphia, Pennsylvania, under builders plate # 21788. She is coal fired and operated by two men, an engineer and a fireman.

The wheel pattern is a 2-8-2 or Mikado, with one set of pilot trucks, four sets of drivers and one set of trailing trucks.

The engine was originally constructed as a Vauclain compound, however she was later changed to piston valves by the D&RGW shops in Alamosa. This change also included the adoption of Walschaerts valve motion and linkages.

The boiler is a straight circular design of riveted construction, 60 inches in diameter by 16 feet long and has a maximum working pressure rating of 200 pounds per square inch. Originally built as a saturated steam engine she was changed to a superheated steam engine in 1927.

The frame, which carries the boiler and firebox and rides on the wheels is of the outside pattern. That is the frame, springs and bearings are mounted outside the wheels.

The locomotive has a steam operated cross-compound Westinghouse air pump and braking system. She also has a Pyle-National 32 volt electrical system. The cab is enclosed and has a foul weather curtain that can be pulled across the gangway.

The tender was originally of the slope back design, but was later changed to the rectangular type with increased coal and water capacity.

The loaded weight of the locomotive and tender ready for service is slightly under 90 tons.

All of the noted changes to the locomotive were made by the D&RGW shops in an effort to standardize and improve. The restoration effort currently under way at the Antonito shops of the C&TS is directed toward putting her in operation in the last known version outshopped by the Rio Grande.

The locomotive may be seen in the Antonito shops by securing permission from local Town officials. It is the local ambition to have the locomotive operable in time for the Bicentennial in 1976.

PERIOD	AREAS OF SIGNIFICANCE CHECK AND JUSTIFY BELOW					
PREHISTORIC	ARCHEOLOGY-PREHISTORIC	COMMUNITY PLANNING	LANDSCAPE ARCHITECTURE	RELIGION		
1400-1499	ARCHEOLOGY-HISTORIC	CONSERVATION	LAW	SCIENCE		
1500-1599	AGRICULTURE	ECONOMICS	LITERATURE	SCULPTURE		
1600-1699	ARCHITECTURE	EDUCATION	MILITARY	SOCIAL/HUMANITARIAN		
1700-1799	ART	X_ENGINEERING	MUSIC	THEATER		
1800-1899	COMMERCE	EXPLORATION/SETTLEMENT	PHILOSOPHY	X_TRANSPORTATION		
X 1900-	COMMUNICATIONS	X _INDUSTRY	POLITICS/GOVERNMENT	OTHER (SPECIFY)		

INVENTION

1903

BUILDER/ARCHITECT Baldwin Company Philadelphia, Pennsylvania

STATEMENT OF SIGNIFICANCE

SPECIFIC DATES

This engine is one of two of the last remaining locomotives of the K-2 series which originally were built for and operated by the Denver and Rio Grande Western Railroad. The locomotive was built in 1903 by the Baldwin Locomotive Works of Philadelphia, Pennsylvania.

Beginning at about the turn of the century the Rio Grande and Colorado had somewhat recovered from the effects of the Silver Crash of 1893. an effort to upgrade their freight service and haul more tonnage per train, the company sought and advanced design locomotive. It was also at this time that the Baldwin Company was experiencing a marked increase in orders and a demand for locomotives designed for special service. This necessitated an expansion of the Works both in the engineering and erecting departments. Thus the Rio Grande order was probably tackled with much enthusiasium by the innovative designers of Baldwin. Previously the narrow gauge engines had all been inside frame and of the light consolidation wheel pattern, basically the same design as was originally developed for the Lehigh Valley Railroad in 1866. While the K-27 series was a departure from the design most prevalent on the Colorado narrow gauge, it was really a marriage of two basic ideas employed much earlier - the outside frame and the Mikado wheel pattern. On page 80 of the authorized "History of the Baldwin Locomotive Works" the outside frame is described:

"A locomotive for the Antofogasta Railway, of Chile, constructed with outside frame, was completed in November, 1886, --- The advantages of this method of construction of narrow gauge locomotive in certain cases were evidenced in the working of this machine, in giving a greater width of firebox between the frames and a greater stability of the engine due to outside journal bearings."

Again on page 89, the Mikado wheel pattern is described:

"Early in 1897, a group of unusually interesting locomotives were shipped to the Nippon Railway (Japan). These locomotives were all designed to burn a most inferior quality of coal, requiring large grate and a firebox of ample depth and volume. They were of two types—The Atlantic, for passenger service and a modified design of Consolidation for freight service. The latter has a wide, deep firebox, which was placed entirely back of the driving wheels and over a rear truck. All these locomotives proved highly successful. Freight locomotives of a design similar to those built for the Nippon Railway were subsequently introduced in the United States, and were appropriately designated the Mikado type."



9 MAJOR BIBLIOGRAPHICAL REFERENCES

History of The Baldwin Locomotive Works, Re-printed by Old Line Publishers, Box 123, Milwaukee, Wisconsin 53201

Steam in the Rockies, Colorado Railroad Museum, Box 641, Golden, Colo. Boiler Specification CardLocomotive # 453, Town of Antonito, Antonito, Co 10 GEOGRAPHICAL DATA ACREAGE OF NOMINATED PROPERTY UTM REFERENCES 410160 A 1 1,3 1 410,912,4,0 | **4,1[0, 2**] **9,2**,0 ZONE EASTING NORTHING ZONE EASTING NORTHING VERBAL BOUNDARY DESCRIPTION LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES STATE CODE COUNTY CODE STATE CODE COUNTY CODE TIFORM PREPARED BY NAME / TITLE Robert A. Burggraaf, P.E. Project Engineer DATE ORGANIZATION April 1, 1975 Town of Antonito STREET & NUMBER TELEPHONE Post Office Box 463 STATE CITY OR TOWN Colorado Antonito 12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS: NATIONAL_ STATE As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665). I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. muck SIGNATURE DATE 4-20-15 FOR NPS USE ONLY I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER DATE DIRECTOR DEPICE OF DATE

Form No. 10-300a (Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY

RECEIVED

APR 2 9 1975

DATE ENTERED

MAY 1 2 1975

CONTINUATION SHEET Significance ITEM NUMBER 8 PAGE 2

It is readily apparent that the common denominator is the larger firebox. This feature was directly equated with greater steaming ability and more power. To this basic the Vauclain compound cylinder system was added, an ingenious device of Samuel Vauclain. General Supertendent of the Works a that time, which "recycled" the high pressure exhaust steam through a second set of low pressure cylinders, thereby increasing the efficiency of the engine. The net result was a locomotive one and one-half times more powerful and the tonnage lifted over the 4% grades of the Rio Grande mainline narrow gauge was almost doubled.

Truly, the arrival of the fifteen new K-27s in 1903, marked a significant turning point in the operation of the D&RGW's narrow gauge lines that was to remain in effect until the end of Class I narrow gauge steam in 1968.

In 1955, Engine # 463 was sold to the cowboy singing star, Gene Autry and was shipped to his Melody Ranch at Newhall, California. This action probably saved the engine from the scrap pile. In 1971, action was started by a preservation minded group of railfans to seek the return of the engine to the former D&RGW narrow gauge operation which had been acquired by the States of Colorado and New Mexico and is now listed as the Cumbres and Toltec Scenic Railroad on the National Register of Historic Places. The engine was donated by Mr. Autry to the Town of Antonito in November, 1971 and arrived in Town in March of 1972.

About this time 463's only surviving sister # 464 was sold by the D&RGW to Knott's Berry Farm of Buena Park, California and subsequently shipped to the Berry Farm in 1973. After more than six months work the 464 was put into service on the Berry Farm's 1% mile loop as an amusement attraction.

The Town of Antonito plans to return the 463 to active service on the C&TS Railroad. Here she will again, as she once did in her past, work the 64 miles of mountainous narrow gauge climbing 4% grades, chuffing thru tunnels and over high bridges, her whistle will echo from the canyon walls to Toltec Gorge and her steam and smoke will be seen again amongst the beautiful golden fall color of high country aspen groves.

It is significant that this engine, which 70 years earlier made an impact on the local scene should do it a second time, for she is the oldest one on the C&TS line and is still alive and well.