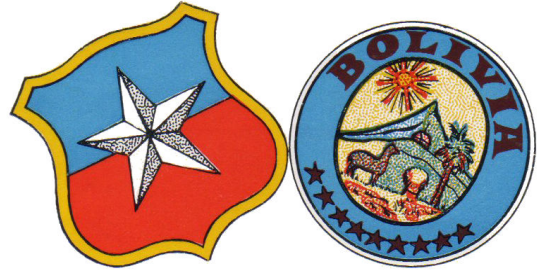


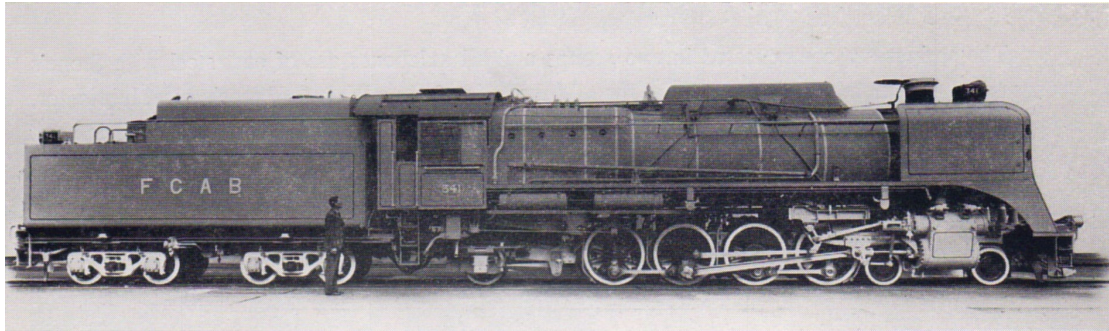
ANTOFAGASTA BOLIVIA RAILWAY



Metre Gauge

1954

4-8-2



Cylinders.....	(2) 19 in. Diam. x 26 in. Stroke	Maximum Axleload.....	15 tons
Diameter Coupled Wheels.....	4 ft. 0 in.	Weight :	
Working Pressure.....	200 lb.	Engine in Working Order.....	88.1 "
Tractive Effort at 85% Pressure.....	33,240 lb.	Tender " "	58.05 "
		Total " "	146.15 "

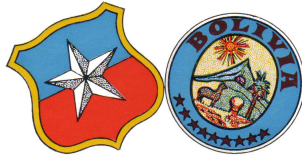
The Antofagasta Bolivia Railway connects the port of Antofagasta in Northern Chile with La Paz, the capital of Bolivia, situated on the High Plateau of that country. To do so it has to cross the Andes mountains and climb to a height of 13,396 ft., and virtually the whole of the Bolivian Section of the railway operates at an altitude of over 12,000 ft.

In 1954, The Vulcan Foundry built 16 4-8-2 oil-burning locomotives for this railway, 6 for the Chilean Section and 10 for the Bolivian.

To ensure an adequate supply of steam on the continuous and arduous gradients, the locomotives are provided with a very large-boiler consisting of a 3-course barrel and Belpaire firebox with all-welded steel inner shell.

The superheater has 28 elements and the regulator is of the multiple valve type with a shutdown valve in the dome.

Boiler mountings include a No. 12 Friedman live steam injector and a No. 11 HJ exhaust steam injector, top-feed clackboxes with feed trays, three Ross Pop safety valves, Klinger water gauges, and 2 Everlasting blow-off cocks.



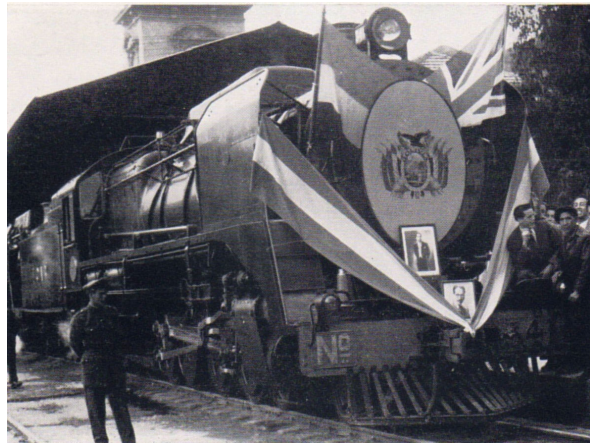
The main slab frames are 4 in. thick and the cylinders are of cast iron, each being made integral with half the smokebox saddle.

The springs are compensated in two groups and all axleboxes are of cast steel with Stone's bronze and white metal bearings arranged for oil lubrication from a Wakefield mechanical lubricator, except on two locomotives where the coupled bearings are of plain bronze with Ajax grease lubricators.

The hind truck is of the Cole type with side spring control.

On 14 engines the motion, connecting and coupling rods are lubricated by oil, but the remaining two are arranged for soft grease.

Other equipment includes Westinghouse air brakes, Henricot automatic couplers, Wakefield sight-feed lubricator, Walter's split bushes, Stone's electric lighting, and pneumatic sanding with two large capacity sandboxes on the boiler top.



Inaugural Train with the first 4-8-2 Locomotive at La Paz

The tender, which has a capacity of 6,000 gallons of water and 74 tons of oil fuel, is carried on two four-wheeled cast steel bogies, equipped with disc wheels and Timken roller-bearing axleboxes.

The locomotives were all shipped, dismantled and packed, to Antofagasta and were re-erected at the Mejillones Workshops of the Chilean Section of the railway.