

## REPORT ON BOILERS.

No. 133852

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Date of writing Report 27 Aug 1951 When handed in at Local Office 28 Aug 1951 Port of LIVERPOOLNo. in Reg. Book. Survey held at Birkenhead Date, First Survey 16/6/49 Last Survey 27 August 1951(Number of Visits.....) Tons { Gross 12741  
Net 7395on the single screw tug "PRESIDENTE PERON"Built at Birkenhead By whom built Cammell, Laird & Co. Ltd. Yard No. 1205 When built 1951Engines made at Birkenhead By whom made Cammell, Laird & Co. Ltd. Engine No. 1205 When made 1951Boilers made at Birkenhead By whom made Cammell, Laird & Co. Ltd. Boiler No. 1205 When made 1951MN 483 Owners Yacimientos Petroliferos Fiscales Port belonging to Buenos AiresMULTITUBULAR BOILERS ~~MAIN~~, ~~AUXILIARY~~, OR DONKEY.Manufacturers of Steel Colvilles, Ltd. (Letter for Record S)Total Heating Surface of Boilers 5800 sq ft = 2 boilers Of Superheaters ☒Total for Register Book ☒ Is forced draught fitted yes Coal or Oil fired oilNo. and Description of Boilers Two single ended return tube Working Pressure 150 lbTested by hydraulic pressure to 275 lb Date of test 1-12-50 No. of Certificate 2789 Can each boiler be worked separately yesArea of Firegrate in each Boiler ☒ No. and Description of safety valves to each boiler one double 2 3/4" Improved High LiftArea of each set of valves per boiler { per Rule 11.2 sq"  
as fitted 11.8 sq" Pressure to which they are adjusted 150 lb Are they fitted with easing gear yesIn case of donkey boilers, state whether steam from main boilers can enter the donkey boiler noSmallest distance between boilers or uptakes and bunkers or woodwork well clear Is oil fuel carried in the double bottom under boilers noSmallest distance between shell of boiler and tank top plating ☒ Is the bottom of the boiler insulated yesLargest internal dia. of boilers 15'-6" Length 12'-0" Shell plates: Material Steel Tensile strength 29-33 T/0"If fusion welded, state name of welding Firm ☒ Have all the requirements of the Rules for Class I vesselsbeen complied with ☒ Thickness 1 1/8" Are the shell plates welded or flanged no Description of riveting: circ. seams { end DR  
inter ☒long. seams T.R. double butt straps Diameter of rivet holes in { circ. seams 1 1/8"  
long. seams 1 1/8" Pitch of rivets { 2.94"  
7 7/8"Percentage of strength of circ. end seams { plate 61  
rivets 50 Percentage of strength of circ. intermediate seam { plate ☒  
rivets ☒Percentage of strength of longitudinal joint { plate 85.7  
rivets 88  
combined 89Thickness of butt straps { outer 7/8"  
inner 1 1/16" No. and Description of Furnaces in each Boiler Three Duplex SectionMaterial Steel Tensile strength 26-30 T/0" Smallest outside diameter 3'-10 3/8"Length of plain part { top ☒  
bottom ☒ Thickness of plates 9/16" Description of longitudinal joint WeldDimensions of stiffening rings on furnace or c.c. bottom ☒End plates in steam space: Material Steel Tensile strength 26-30 T/0" Thickness 1 3/32" Pitch of stays 22" x 17 1/2"How are stays secured Double nut and outside washersTube plates: Material { front Steel  
back Steel Tensile strength { 26-30 T/0"  
26-30 T/0" Thickness { 7/8"  
13/16"Mean pitch of stay tubes in nests 11 1/4" x 7 3/4" Pitch across wide water spaces 13 1/2"Girders to combustion chamber tops: Material Steel Tensile strength 28-32 T/0" Depth and thickness of girderat centre 12 1/2" x 1 1/4" Length as per Rule 3'-1 1/2" Distance apart 9" No. and pitch of staysin each Welded to c.c. top Combustion chamber plates: Material SteelTensile strength 26-30 T/0" Thickness: Sides 2 1/32" Back 1 1/16" Top 2 1/32" Bottom 7/8"Pitch of stays to ditto: Sides 9 1/2" x 9 1/2" Back 9 3/4" x 9 1/2" Top Welded Are stays fitted with nuts or riveted over nutsFront plate at bottom: Material Steel Tensile strength 26-30 T/0"Thickness 7/8" Lower back plate: Material Steel Tensile strength 26-30 T/0" Thickness 7/8"Pitch of stays at wide water space 15" x 9 1/2" Are stays fitted with nuts or riveted over nutsMain stays: Material Steel Tensile strength 28-32 T/0"Diameter { At body of stay 3"  
or  
Over threads 3" No. of threads per inch 6Screw stays: Material Steel Tensile strength 26-30 T/0"Diameter { At turned off part 1 5/8"  
or  
Over threads 1 5/8" No. of threads per inch 9

Are the stays drilled at the outer ends.....to.....Margin stays: Diameter { At turned off part.....  
or.....  
Over threads.....1 3/4.....  
No. of threads per inch.....9.....  
Tubes: Material Steel.....External diameter { Plain.....2 1/2.....Thickness { 9/16.....No. of threads per inch.....9.....  
Stay.....2 1/2.....  
Pitch of tubes.....3 7/8 x 3 3/4.....Manhole compensation: Size of opening in  
shell plate.....17 1/4 x 21 1/4.....Section of compensating ring.....15 1/2 x 1 3/16.....No. of rivets and diameter of rivet holes.....48 1/8.....  
Outer row rivet pitch at ends.....7 7/8.....Depth of flange if manhole flanged.....3 1/2.....Steam Dome: Material.....  
Tensile strength.....✓.....Thickness of shell.....✓.....Description of longitudinal joint.....✓.....  
Diameter of rivet holes.....✓.....Pitch of rivets.....✓.....Percentage of strength of joint { Plate.....✓.....  
Rivets.....✓.....  
Internal diameter.....✓.....Thickness of crown.....✓.....No. and diameter of  
stays.....✓.....Inner radius of crown.....✓.....  
How connected to shell.....✓.....Size of doubling plate under dome.....✓.....Diameter of rivet holes and pitch  
of rivets in outer row in dome connection to shell.....✓.....

Type of Superheater.....✓.....Manufacturers of { Tubes.....✓.....  
Steel forgings.....✓.....  
Steel castings.....✓.....  
Number of elements.....✓.....Material of tubes.....✓.....Internal diameter and thickness of tubes.....  
Material of headers.....✓.....Tensile strength.....✓.....Thickness.....✓.....Can the superheater be shut off and  
the boiler be worked separately.....✓.....Is a safety valve fitted to every part of the superheater which can be shut off from the boiler.....✓.....  
Area of each safety valve.....✓.....Are the safety valves fitted with easing gear.....✓.....  
Pressure to which the safety valves are adjusted.....✓.....Hydraulic test pressure:  
tubes.....✓.....forgings and castings.....✓.....and after assembly in place.....✓.....Are drain cocks or  
valves fitted to free the superheater from water where necessary.....✓.....

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with.....yes.....

The foregoing is a correct description,  
E. D. Barry.....Manufacturer,  
ENGINEERING MANAGER.

Dates of Survey { During progress of work in shops - - }.....Are the approved plans of boiler and superheater forwarded herewith.....  
while building { During erection on board vessel - - - }.....(If not state date of approval.)  
Total No. of visits.....

Is this Boiler a duplicate of a previous case.....yes.....If so, state Vessel's name and Report No. General San Martin.....

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.).....These boilers have been constructed under special survey in accordance with the approved plans, the Society's Rules and the Secretary's letters. The materials and workmanship are good. They have been properly installed in the vessel and tried under working conditions with satisfactory results.

Survey Fee.....See Rpt. 7a.....£.....:.....:.....When applied for.....19.....  
Travelling Expenses (if any) £.....:.....:.....When received.....19.....

E. D. Barry  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute.....LIVERPOOL.....2 OCT 1951.....  
Assigned.....See Minute on H. M. R. Rpt......