

# REPORT ON BOILERS.

No. 4056  
TUE. 19 APR. 1921

Received at London Office

Port of Philadelphia  
 No. in Survey held at Cornwells Pa Date, First Survey 26 July 1920 Last Survey 23 March 1921  
 Reg. Book. on the New Steel S.S. "San Leon" (Number of Visits 29) Gross Tons 6349  
 Master J. F. Beaton Built at Wilmington N.C. By whom built Carolina Steel Coy. No 56 SS When built 1920  
 Engines made at Hamilton Ohio By whom made Hodder, Calkins & Reutcher When made 1919  
 Boilers made at Cornwells Pa By whom made Badenhausen Coy. When made 1920  
 Registered Horse Power 2800 Owners Eagle. Cd. Transport. Co Port belonging to London, England.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel Lukins Steel Coy.

Letter for record 10 Total Heating Surface of Boilers 9042 Is forced draft fitted Yes No. and Description of Boilers Three Single ended Working Pressure 200 lbs Tested by hydraulic pressure to 350 lbs Date of test 17/2/1921

No. of Certificate 9 Can each boiler be worked separately Yes Area of fire grate in each boiler 45.5 sq ft No. and Description of Safety valves to each boiler one 3 1/2" Duplex Area of each valve 19.6 sq in Pressure to which they are adjusted 205 lbs.

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes

Least distance between boilers or uptakes and bunkers or woodwork 8" <sup>INSIDE</sup> Max dia. of boilers 15'-3" Length 11'-6 3/8"

Material of shell plates Steel Thickness 1 1/8" Range of tensile strength 41680 Are the shell plates welded or flanged No

Strip of riveting: cir. seams D.R. Lap, long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 8 3/4"

Material of plates or width of butt straps 2 2 3/8" Per centages of strength of longitudinal joint 90.1 Working pressure of shell by rules 201 lbs Size of manhole in shell 16" x 12" Size of compensating ring 3'-0 1/2" x 2'-8 1/2" No. and Description of Furnaces in each boiler 3 Cor Material Steel Outside diameter 4'-0 1/4" Length of plain part top Thickness of plates crown 7/8" bottom 7/8"

Description of longitudinal joint Weld No. of strengthening rings 1 Working pressure of furnace by the rules 208 lbs Combustion chamber Material Steel Thickness: Sides 2 1/8" Back 1 3/16" Top 2 1/8" Bottom 1 5/16" Pitch of stays to ditto: Sides 4 1/8" x 4 1/8" Back 4 1/2" x 4 1/2"

If stays are fitted with nuts or riveted heads riveted heads Working pressure by rules 213 lbs Material of stays Iron Area at least part 1.8 Area supported by each stay 56 1/4" Working pressure by rules 242 lbs End plates in steam space: Material Steel Thickness 1 1/8"

How are stays secured Nuts Working pressure by rules 210 lbs Material of stays Steel Area at smallest part 5.94"

Material of Front plates at bottom Steel Thickness 1 1/8" Material of back plate Steel Thickness 1 1/8" Greatest pitch of stays 8" x 14 1/2" Working pressure of plate by rules 302 lbs Diameter of tubes 3"

Material of tube plates Steel Thickness: Front 1 1/8" Back 1 3/16" Mean pitch of stays 10 7/8" Pitch across wide spaces 14 3/4" Working pressures by rules 200 lbs Girders to Chamber tops: Material Steel Depth and thickness of

at centre 2 @ 9" x 1" Length as per rule 34 1/8" Distance apart 8 1/4" Number and pitch of Stays in each 4 @ 4 1/4"

Working pressure by rules 228 lbs Steam dome: description of joint to shell None % of strength of joint

Thickness of shell plates 1 1/8" Material Steel Description of longitudinal joint Weld Diam. of rivet holes 1 1/16"

Working pressure of shell by rules 200 lbs Crown plates None Thickness None How stayed None

Superheater. Type None Date of Approval of Plan None Tested by Hydraulic Pressure to None

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler None

Pressure to which each is adjusted None Is Easing Gear fitted None

The foregoing is a correct description, Badenhausen Leo - Embroel Plant Engineers Manufacturer.

Is the approved plan of boiler forwarded herewith Yes

During progress of work in shops -- July 26 Aug 16 Sept 10 - 21 - 28 Oct 5 13 20  
 During erection on board vessel -- Oct 5 15 21 Nov 5 22 Dec 3 20 Jan 5 28 Total No. of visits 29  
 Feb. 4, 12, 26, March 4, 23.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The shell plates and end plates being shipped drilled ready for erecting Combustion Chamber finished ready fitting in boiler material and workmanship all good. The Boilers will be assembled & finished at Wilmington N.C. Savannah Surveyor has been notified above Boilers have been fitted on board the above vessel in a satisfactory manner and the Safety Valves tested to 205 lbs pressure.

Survey Fee \$ 213.75 When applied for 31st Mar 1921  
 Travelling Expenses (if any) £ 7.00 When received 17th Mar 1921

Committee's Minute New York APR - 5 1921  
 Assigned See fax 3E Rpt 389  
 TUE. 27 MAR. 1923  
 FRI. 17 AUG. 1923

