Messrs Hawthorn Leslie & Co S. S. No 411- Engines 2643.

TUES. SEP 18 1906

pt. 5.

REPORT ON BOILERS.

No. 51604

Port of Newcastle on Tyne

Received at London Office 19

No. in Reg. Book. 17 Survey held at Newcastle Date, first Survey ✓ Last Survey 8 Sept 1906.

(Number of Visits .....)

on the Steel S. S. "Port Augusta" Tons Gross 4068 Net 2584

ister ..... Built at Newcastle By whom built Hawthorn Leslie & Co When built 1906

gines made at Newcastle By whom made Hawthorn Leslie & Co Ltd when made 1906

ilers made at D: By whom made D: when made 1906

gistered Horse Power ..... Owners (W Milburn & Co Mgrs) Port belonging to London.

ULTITUBULAR BOILERS—~~MAIN~~, AUXILIARY ~~OR DONKEY~~.—Manufacturers of Steel Spencer & Sons

Letter for record S) **Total Heating Surface of Boilers** 1121 ☐ft Is forced draft fitted No **No. and Description of**

oilers One Cyl Multr (aux.) **Working Pressure** 180 Tested by hydraulic pressure to 360 Date of test 13-6-06

o. of Certificate 7244 Can each boiler be worked separately ✓ **Area of fire grate in each boiler** 30 ☐ft No. and Description of

afety valves to each boiler Two Spring Area of each valve 3-98 Pressure to which they are adjusted 185

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

mallest distance between boilers or uptakes and bunkers or woodwork 2-0 ~~Mean~~ Int. dia. of boilers 11-0 Length 10-6

Material of shell plates S Thickness 1/64 Range of tensile strength 29/32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams d Lap long. seams d Strap Diameter of rivet holes in long. seams 1 1/4 Pitch of rivets 6 1/4

~~Lap of plates or~~ width of butt straps 12 15/16 Per centages of strength of longitudinal joint rivets 86 plate 80 Working pressure of shell by

ules 192 Size of manhole in shell 16 × 12 Size of compensating ring 33 1/8 × 29/18 × 1/64 **No. and Description of Furnaces in each**

oiler 2 Deighton Material S Outside diameter 37 Length of plain part top ..... bottom ✓ Thickness of plates crown ..... bottom 1/2

Description of longitudinal joint welded No. of strengthening rings ✓ Working pressure of furnace by the rules 204 Combustion chamber

lates: Material S Thickness: Sides 5/8 Back 5/8 Top 5/8 Bottom 13/16 Pitch of stays to ditto: Sides 7 × 8 Back 8 × 8

Top 7 × 8 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 211 Material of stays S ~~Diameter~~ Area at

mallest part 1-5 Area supported by each stay 64 Working pressure by rules 187 End plates in steam space: Material S Thickness 1 1/8

Pitch of stays 15 3/4 × 16 How are stays secured d h + w Working pressure by rules 238 Material of stays S ~~Diameter~~ Area at smallest part 5·05

Area supported by each stay 252 Working pressure by rules 200 Material of Front plates at bottom S Thickness 1 Material of

Lower back plate S Thickness 15/16 Greatest pitch of stays as per plan Working pressure of plate by rules 180 Diameter of tubes 3 1/4

Pitch of tubes 4 1/2 × 4 1/2 Material of tube plates S Thickness: Front 1 Back 3/4 Mean pitch of stays 9 Pitch across wide

water spaces 14 1/2 Working pressures by rules 226 Girders to Chamber tops: Material S Depth and thickness of

girder at centre 8 × 1 1/2 Length as per rule 28 Distance apart 8 Number and pitch of Stays in each 3-7

Working pressure by rules 202 Superheater or Steam chest; how connected to boiler — Can the superheater be shut off and the boiler worked

separately — Diameter — Length — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet

holes — Pitch of rivets — Working pressure of shell by rules — Diameter of flue — Material of flue plates — Thickness —

If stiffened with rings — Distance between rings — Working pressure by rules — End plates: Thickness — How stayed —

Working pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

VERTICAL DONKEY BOILER—

No. ..... Description ..... Manufacturers of steel .....

Made at ..... By whom made ..... When made ..... Where fixed .....

Working pressure ..... tested by hydraulic pressure to ..... No. of Certificate ..... Fire grate area ..... Description of safety valves .....

No. of safety valves ..... Area of each ..... Pressure to which they are adjusted ..... If fitted with easing gear ..... If steam from main boilers can

enter the donkey boiler ..... Dia. of donkey boiler ..... Length ..... Material of shell plates ..... Thickness ..... Range of tensile

strength ..... Descrip. of riveting long. seams ..... Dia. of rivet holes ..... Whether punched or drilled ..... Pitch of rivets .....

Lap of plating ..... Per centage of strength of joint Rivets ..... Plates ..... Working pressure of shell by rules ..... Thickness of shell crown plates .....

Radius of do. ..... No. of Stays to do. ..... Dia. of stays ..... Diameter of furnace Top ..... Bottom ..... Length of furnace .....

Thickness of furnace plates ..... Description of joint ..... Working pressure of furnace by rules ..... Thickness of furnace crown

plates ..... Stayed by ..... Diameter of uptake ..... Thickness of uptake plates ..... Thickness of water tubes .....

The foregoing is a correct description,

..... *Manufacturer.*

C C

Dates of Survey while building — During progress of work in shops - - - Please see report on machinery.

During erection on board vessel - - -

Total No. of visits .....

Is the approved plan of main boiler forwarded herewith? Yes

" " " donkey " " " .....

From outside firm Port Number.

W646-0063

GENERAL REMARKS (*State quality of workmanship, opinions as to class, &c.*

The material & workmanship is good.
The boiler has been built under special Survey.

Certificate (if required) to be sent to

(*The Surveyors are requested not to write on or below the space for Committee's Minute.*)

The amount of Entry Fee... £ : : } When applied for,
Special ... ... £ : : } 17 SEP 1906 19
Donkey Boiler Fee ... £ 2 : 2 : } When received,
Travelling Expenses (if any)) £ : : } 20/9/06 19

21.9.06

John H Heck.
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. 21 SEP 1906

Assigned