

# REPORT ON BOILERS.

Port of Glasgow

Received at London Office **THUR. 9 AUG 1906**

No. in Survey held at Glasgow  
Reg. Book.

Date, first Survey 4 Oct 05 Last Survey 28 July 1906

(Number of Visits)

on the

S.S. "Luristan"

Tons }  
Gross  
Net

Master \_\_\_\_\_ Built at St. Glasgow By whom built W Hamilton & Co When built 1906  
 Engines made at Glasgow By whom made David Rowan & Co when made 1906  
 Boilers made at do By whom made do when made 1906  
 Registered Horse Power \_\_\_\_\_ Owners F C Strick & Co Port belonging to Swansea

## MULTITUBULAR BOILERS—~~MAIN, AUXILIARY OR DONKEY.~~—Manufacturers of Steel Glyde Bridge Steel Works.

(Letter for record 15) Total Heating Surface of Boilers 824.6 <sup>sq</sup> Is forced draft fitted No No. and Description of

Boilers One Single Ended Working Pressure 100 <sup>lb</sup> Tested by hydraulic pressure to 200 <sup>lb</sup> Date of test 18.6.06

No. of Certificate 8189 Can each boiler be worked separately Yes Area of fire grate in each boiler 31.6 <sup>sq</sup> No. and Description of

safety valves to each boiler 2 Spring Area of each valve 5.9 <sup>sq</sup> Pressure to which they are adjusted 105 <sup>lb</sup>

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No

Smallest distance between boilers or uptakes and bunkers or woodwork abt 15" <sup>int</sup> dia. of boilers 10'-0" Length 9'-6"

Material of shell plates steel Thickness 2 1/32" Range of tensile strength 28632 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams D. R. L. long. seams T. R. L. Diameter of rivet holes in long. seams 15/16" Pitch of rivets 3 3/8"

Lap of plates or width of butt straps 6 1/2" Per centages of strength of longitudinal joint rivets 79.5 Working pressure of shell by

rules 103 Size of manhole in shell 16" x 12" Size of compensating ring 2'-7" x 2'-3" plate 72.2 No. and Description of Furnaces in each

boiler 2 plain Material steel Outside diameter 2'-11 3/8" Length of plain part top 7 1/4" Thickness of plates crown 17/32" bottom 9/16"

Description of longitudinal joint weld No. of strengthening rings none Working pressure of furnace by the rules 100 <sup>lb</sup> Combustion chamber

plates: Material steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 7/8" Pitch of stays to ditto: Sides 8 1/2" x 9" Back 8 1/4" x 9"

Top 8 1/2" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 100 <sup>lb</sup> Material of stays steel Diameter at

smallest part .99 <sup>sq</sup> Area supported by each stay 76 <sup>sq</sup> Working pressure by rules 104 End plates in steam space: Material steel Thickness 13/16"

Pitch of stays 14 1/4" x 14 1/2" How are stays secured D. nuts Working pressure by rules 144 Material of stays steel Diameter at smallest part 2.75 <sup>sq</sup>

Area supported by each stay 206 <sup>sq</sup> Working pressure by rules 133 Material of Front plates at bottom steel Thickness 25/32" Material of

Lower back plate steel Thickness 2 1/32" Greatest pitch of stays 14 1/4" Working pressure of plate by rules 104 Diameter of tubes 3 1/4"

Pitch of tubes 14 1/2" x 14 3/8" Material of tube plates steel Thickness: Front 25/32" Back 7/8" Mean pitch of stays 11 1/8" Pitch across wide

water spaces 14 1/4" Working pressures by rules 107 <sup>lb</sup> Girders to Chamber tops: Material steel Depth and thickness of

girder at centre 6 1/4" x 1/2" x 2" Length as per rule 25" Distance apart 8" Number and pitch of Stays in each 2-8 1/2"

Working pressure by rules 115 Superheater or Steam chest; how connected to boiler none 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 \_\_\_\_\_ 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,

David Rowan & Co Manufacturer.

See accompanying report.

Dates of Survey while building  
 During progress of work in shops - - -  
 During erection on board vessel - - -  
 Total No. of visits \_\_\_\_\_

Is the approved plan of main boiler forwarded herewith \_\_\_\_\_

" " " donkey " " \_\_\_\_\_



If not, state whether, and when, one will be sent? In a Report also sent on the Hull of the Ship?

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

This boiler has been constructed under Special Survey & is of good materials & workmanship. It has been fitted on board as stated Rpt. H.

Boiler built by Glasgow Boiler Works Ltd. Glasgow  
 When made 1908  
 Port belonging to Glasgow

**MULTITUBULAR BOILERS**

No. and Description of Boiler	Total Heating Surface of Boiler	Working Pressure	Area of Fire Grate in each boiler	Pressure to which they are adjusted
103 2 plain steel	16 x 12	100 lbs	31.6	3.0

**VERTICAL DONKEY BOILER**

No.	Description	Manufacturer of steel	When made
104	Vertical donkey boiler	W. & A. Mitchell	1908

The amount of Entry Fee...	£	:	When applied for,
Special ...	£	:	19
Donkey Boiler Fee ...	£	:	When received,
Travelling Expenses (if any) £	£	:	19

*Hardner-Smith*  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute Glasgow - 8 AUG 1908

Assigned See accompanying report.



Certificate (if required) to be sent to Committee's Minute.