TUES. FEB 26 1907

Rpt. 5.

REPORT ON BOILERS.

No. 24727

Port of Glasgow Received at London Office THUR. DEC 27 1906

No. in Reg. Book. Survey held at Date first Survey 31st Aug Last Survey 18th Dec 1906

on the Screw Steamer Lord Sefton. Boiler No 1086 for Messrs A McMillan & Sons No 409 (Number of Visits) Tons Gross / Net

Master Built at By whom built When built

Engines made at Greenock By whom made Rankine & Blackmore when made

Boilers made at Glasgow By whom made Messrs Lindsay Burnet & Co when made 1906

Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR~~ DONKEY.—Manufacturers of Steel Clydebridge Lanarkshire

(Letter for record S) **Total Heating Surface of Boilers** 755 ft² Is forced draft fitted — **No. and Description of Boilers** One Single Ended **Working Pressure** 100 lb Tested by hydraulic pressure to 200 Date of test 18-12-06

No. of Certificate 8299 Can each boiler be worked separately **Area of fire grate in each boiler** No. and Description of safety valves to each boiler Area of each valve Pressure to which they are adjusted

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

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers 10' 0" Length 9' 0"

Material of shell plates S Thickness 5/8" Range of tensile strength 28-32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams Single long. seams T R Lap Diameter of rivet holes in long. seams 7/8 Pitch of rivets 4 1/8"

Lap of plates ~~or width of butt straps~~ 6 1/2" Per centages of strength of longitudinal joint rivets 79.18 plate 78.75 Working pressure of shell by rules 103 Size of manhole in shell 12" x 16" Size of compensating ring 5 1/2 x 23/32 **No. and Description of Furnaces in each boiler** Two plain Material S Outside diameter 36" Length of plain part top 60" bottom 65 Thickness of plates crown bottom 7/16"

Description of longitudinal joint Weld No. of strengthening rings — Working pressure of furnace by the rules 110 Combustion chamber plates: Material S Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 9/16" Pitch of stays to ditto: Sides 10 1/2 x 8 1/2 Back 10 x 9 3/4

Top 11 1/2 x 8 1/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 107 Material of stays S ~~Diameter~~ area at smallest part 1.192 (1.44) Area supported by each stay 10 1/2 x 8 1/2 Working pressure by rules 100 End plates in steam space: Material S Thickness 7/8"

Pitch of stays 17 1/2" How are stays secured Nuts Working pressure by rules 100 Material of stays S ~~Diameter~~ area at smallest part 3.14

Area supported by each stay 17 1/2 x 19" Working pressure by rules 103 Material of Front plates at bottom S Thickness 23/32 Material of Lower back plate S Thickness 5/8 Greatest pitch of stays 10 Working pressure of plate by rules 100 Diameter of tubes 3 1/2

Pitch of tubes 4 3/4 x 4 5/8 Material of tube plates S Thickness: Front 23/32" Back 23/32" Mean pitch of stays 13 1/2 Pitch across wide water spaces 13 1/2" Working pressures by rules 102 Girders to Chamber tops: Material S Depth and thickness of girder at centre 7 x 1 1/4" Length as per rule 25 3/4 Distance apart 11 1/2" Number and pitch of Stays in each Two at 8 1/2"

Working pressure by rules 118 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

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VERTICAL DONKEY BOILER— No. Description Manufacturers of steel

Made at By whom made When made Where fixed Working pressure tested by hydraulic pressure to Date of test 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 Radius of do. Stayed by Diameter of uptake Thickness of uptake plates

Thickness of water tubes

The foregoing is a correct description,

FOR LINDSAY BURNET & CO. Manufacturers

Dates of Survey while building — During progress of work in shops: 1906: Aug. 31. Sep 28. Oct 15. 24. 29 Nov. 2 10. Dec. 6. 14. 18.

During erection on board vessel:

Total No. of visits 10.

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

If not, state whether, and when, one will be sent?

Is a Report also sent on the Hull of the Ship?

[1m.12.05 Copyable Ink.]

W613-0156

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

This Boiler has been made under survey in accordance with the approved plan & the Requirements of the Rules
The Workmanship is good

Certificate (if required) to be sent t

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

The amount of Entry Fee...	£	:	:	When applied for. 24.DEC.1906 19
Special	£ 2	: 2	:	
Donkey Boiler Fee ...	£	:	:	When received. 16/2/1907
Travelling Expenses (if any))	£	:	:	

Wm Gordon Murchie
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute Glasgow 24 DEC 1906

Assigned Deferred for completion