

(copy)

REPORT ON MACHINERY.

Port of Glasgow

Received at London Office WED. 4 JUL 1900

No. in Survey held at Glasgow Date, first Survey _____ Last Survey _____ 18
 Reg. Book. _____ (Number of visits _____)
 on the New Boiler for the s.s. "Eveleen" Tons } Gross
 Master _____ Built at Belfast By whom built Wortman, Bartles When built 1891 Net
 Engines made at Glasgow By whom made Muir & Houston Ltd. when made 1891
 Boiler made at Glasgow By whom made Harclay, Auld & Co. Ltd. when made 1900.
 Registered Horse Power 90. Owners J. Milligan & Co. Port belonging to Belfast
 Nom. Horse Power as per Section 28 _____ Is Refrigerating Machinery fitted _____ Is Electric Light fitted _____

ENGINES, &c.—Description of Engines Triple No. of Cylinders _____ No. of Cranks _____
 Dia. of Cylinders _____ Length of Stroke _____ Revs. per minute _____ Dia. of Screw shaft as per rule _____ Lgth. of stern bush _____
 Dia. of Tunnel shaft as per rule _____ Dia. of Crank shaft journals as per rule _____ Dia. of Crank pin _____ Size of Crank webs _____ Dia. of thrust shaft under _____
 collars Dia. of screw _____ Pitch of screw _____ No. of blades _____ State whether moveable _____ Total surface _____
 No. of Feed pumps _____ Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
 No. of Bilge pumps _____ Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
 No. of Donkey Engines _____ Sizes of Pumps _____ No. and size of Suctions connected to both Bilge and Donkey pumps _____
 In Engine Room _____ In Holds, &c. _____
 No. of bilge injections _____ sizes _____ Connected to condenser, or to circulating pump _____ Is a separate donkey suction fitted in Engine room & size _____
 Are all the bilge suction pipes fitted with roses _____ Are the roses in Engine room always accessible _____ Are the sluices on Engine room bulkheads always accessible _____
 Are all connections with the sea direct on the skin of the ship _____ Are they Valves or Cocks _____
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the discharge pipes above or below the deep water line _____
 Are they each fitted with a discharge valve always accessible on the plating of the vessel _____ Are the blow off cocks fitted with a spigot and brass covering plate _____
 What pipes are carried through the bunkers _____ How are they protected _____
 Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times _____
 Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges _____
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock _____ Is the screw shaft tunnel watertight _____
 Is it fitted with a watertight door _____ worked from _____

BOILERS, &c.— (Letter for record _____) Total Heating Surface of Boilers 1598 ft² Is forced draft fitted none
 No. and Description of Boilers 1 multitubular Working Pressure 160 Tested by hydraulic pressure to 320.
 Date of test 20/4/00. Can each boiler be worked separately ✓ Area of fire grate in each boiler 260 ft² No. and Description of safety valves to _____
 each boiler 2 Direct Acting Area of each valve 7.0 sq" Pressure to which they are adjusted 165 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 4 ft Mean dia. of boilers 13.6" Length 10.6" Material of shell plates Steel
 Thickness 16/16" Range of tensile strength 286033 Are they welded or flanged Neither Descrip. of riveting: cir. seams D. lap long. seams D. Butt
 Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 7 1/2" Lap of plates or width of butt straps 15 7/8"
 Per centages of strength of longitudinal joint rivets 88% Working pressure of shell by rules 161 lbs Size of manhole in shell 16" X 12"
 plate 86%
 Size of compensating ring _____ No. and Description of Furnaces in each boiler 3 Deighton Material Steel Outside diameter 3.7"
 Length of plain part top _____ bottom ✓ Thickness of plates crown 15/32" Description of longitudinal joint Weld No. of strengthening rings ✓
 Working pressure of furnace by the rules 161 lbs Combustion chamber plates: Material Steel Thickness: Sides 10/16" Back 10/16" Top 10/16" Bottom 10/16"
 Pitch of stays to ditto: Sides 8x9" Back 8x9" Top 8x9" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 187 lbs
 Material of stays Steel Diameter at smallest part 1.45 Area supported by each stay 72" Working pressure by rules 161 lbs End plates in steam space: _____
 Material Steel Thickness 1 1/4" Pitch of stays 2 1/4" X 20" How are stays secured D. nuts Working pressure by rules 164 lbs Material of stays Steel
 Diameter at smallest part 6.1 Area supported by each stay 380" Working pressure by rules 161 lbs Material of Front plates at bottom Steel
 Thickness 25/32" Material of Lower back plate Steel Thickness 11/16" Greatest pitch of stays 13 1/2" Working pressure of plate by rules 200 lbs
 Diameter of tubes 3 3/4" Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 25/32" Back 25/32" Mean pitch of stays 9"
 Pitch across wide water spaces 14 1/4" Working pressures by rules 182 Girders to Chamber tops: Material Steel Depth and _____
 thickness of girder at centre 7 3/8" X 3 3/4" (13) Length as per rule 2.5" Distance apart 8" Number and pitch of Stays in each 2-9"
 Working pressure by rules 164 lbs 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 _____



DONKEY BOILER— No. Description

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 casing 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 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

Thickness of furnace crown plates Stayed by Working pressure of shell by rules

Working pressure of furnace by rules Diameter of uptake Thickness of uptake plates Thickness of water tubes

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Signed on original Manufacturer.

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

Yes

General Remarks (State quality of workmanship, opinions as to class, &c.)

This Main Boiler has been made by Messrs Barclay, Curle & Co. Ltd. The material & workmanship are of good description & test satisfactory. It has now been forwarded to Belfast to be fitted on board the vessel.

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	£	:	:18.....
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:18.....

FRI. 6 JUL 1900

FRI. 27 JUL 1900

(Signed) James Morrison
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



Lloyd's Register Foundation