

REPORT ON MACHINERY.

THUR, AUG 20 1896

Port of Glasgow Received at London Office _____

No. in Survey held at Supplementary Report Date, first Survey _____ Last Survey 18

Reg. Book. _____ (Number of Vents _____)

on the donkey boiler S. S. "La Plata" Tons } Gross _____
 Net _____

Master _____ Built at _____ By whom built _____ When built _____

Engines made at _____ By whom made _____ when made _____

Boilers made at Glasgow By whom made R. Napier & Sons Ltd when made 1896

Registered Horse Power _____ Owners _____ Port belonging to _____

Nom. Horse Power as per Section 28 _____

ENGINES, &c.— Description of Engines See attached report No. of Cylinders _____

Diameter of Cylinders _____ Length of Stroke _____ Revolutions per minute _____ Diameter of Screw shaft ^{as per rule} _____
_{as fitted} _____

Diameter of Tunnel shaft ^{as per rule} _____ Diameter of Crank shaft journals _____ Diameter of Crank pin _____ Size of Crank webs _{as fitted} _____

Diameter 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 1002 sq ft

No. and Description of Boilers One Cylindrical Working Pressure 150 lbs Tested by hydraulic pressure to 360 lbs

Date of test 28-3-96 Can each boiler be worked separately yes Area of fire grate in each boiler 30 sq ft No. and Description of safety valves to each boiler two spring loaded Area of each valve 7'07 1/4" Pressure to which they are adjusted 180 lbs Are they fitted with easing gear yes Smallest distance between boilers or uptakes and bunkers or woodwork 12" in stokehold Mean diameter of boilers 120"

Length 10' 7" Material of shell plates Steel Thickness 3/32" Description of riveting: circum. seams lap 2 Rivets long seams Double Rivets 5 Rivets

Diameter of rivet holes in long. seams 1/16" Pitch of rivets 7/8" Lap of plates or width of butt straps 16 1/4" x 13 1/16"

Per centages of strength of longitudinal joint ^{rivets} 95.6 Working pressure of shell by rules 185 lbs Size of manhole in shell 17" x 12"

Size of compensating ring 1/2" No. 1 No. and Description of Furnaces in each boiler two Morrison Material Steel Outside diameter 39 1/4"

Length of plain part ^{top} 0" ^{bottom} 0" Thickness of plates ^{crown} 3/16" ^{bottom} 3/16" Description of longitudinal joint weld No. of strengthening rings corrugated

Working pressure of furnace by the rules 192 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 3/4"

Pitch of stays to ditto: Sides 7 x 7 1/2" Back 7 x 7 1/4" Top 7 x 7 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 194 lbs

Material of stays Steel Diameter at smallest part 1 1/4" Area supported by each stay 52 1/2" Working pressure by rules 215 lbs End plates in steam space: Material Steel Thickness 1 3/32" Pitch of stays 14 1/2" How are stays secured Double Nuts Working pressure by rules 254 lbs Material of stays Steel

Diameter at smallest part 5 1/4" Area supported by each stay 210 sq in Working pressure by rules 232 lbs Material of Front plates at bottom Steel

Thickness 1 1/16" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 13" Working pressure of plate by rules 204 lbs

Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 1/4" Material of tube plates Steel Thickness: Front 1/16" Back 3/4" Mean pitch of stays 8 3/4"

Pitch across wide water spaces 14 1/2" Working pressures by rules 240 264 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 3/4" x 2 3/4" Length as per rule 24" Distance apart 7 1/2" Number and pitch of Stays in each 2 x 7"

Working pressure by rules 220 lbs Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked separately _____

holes _____ Diameter _____ Length _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet _____ 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 stays _____

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

[42.—I.R.P.H.—000.—Form No. 8.—0994.—Copyright Ink.]

146.20 fl.

DONKEY BOILER— 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 easing gear _____ If steam from main boilers can enter the donkey boiler _____
 Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____
 Description of riveting long. seams _____ Diameter of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____
 Lap of plating _____ Per centage of strength of joint _____ Rivets _____ 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,

R. NAPIER & SONS, Limited. Manufacturer.

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

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

Certificate (if required) to be sent to _____

The amount of Entry Fee..	£	:	When applied for,
Special	£	:	18
Donkey Boiler Fee	£	:	When received,
Travelling Expenses (if any) £	:	:	18

see attached report

C. S. Browne
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

A. McKeand

Committee's Minute **FRI. AUG 21 1896**

Assigned



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