

REPORT ON MACHINERY.

No. 6303

MONDAY 11th JULY 1887.
Received at London Office

No. in Survey held at Hull Date, first Survey 9th Dec 84 Last Survey 8 July 1887
 Reg. Book. on the Iron Screw Steam Tug Python (Number of Visits 21)
 Master [Signature] Built at Hull By whom built Beard & Riley Tons 37.32
 Engines made at Hull By whom made Edward Wales When built 1884
 Boilers made at Hull By whom made Edward Wales when made 1884
 Registered Horse Power 20 Owners Watkins & Co when made 1884
 Port belonging to London

ENGINES, &c.—

Description of Engines Compound Inverted Direct Acting
 Diameter of Cylinders 11" & 22" Length of Stroke 15" No. of Rev. per minute _____ Point of Cut off, High Pressure 8" Low Pressure 4 1/2"
 Diameter of Screw shaft 4 1/4" Diam. of Tunnel shaft 4 1/4" Diam. of Crank shaft journals 4 1/4" Diam. of Crank pin 4 1/4" size of Crank webs 5 1/4" x 2 1/4"
 Diameter of screw 5.2" Pitch of screw 8.0" No. of blades 3 state whether moveable No total surface 8 sq ft
 No. of Feed pumps one diameter of ditto 2" Stroke 10" Can one be overhauled while the other is at work ✓
 No. of Bilge pumps one diameter of ditto 2" Stroke 10" Can one be overhauled while the other is at work ✓
 Where do they pump from Engine room Bilge (Main compartment)
 No. of Donkey Engines one Size of Pumps 2 1/2" x 5" gals Where do they pump from Engine room Bilge
Hotwell Sea Discharges Boiler Condenser Deck and Overboard.
 Are all the bilge suction pipes fitted with roses yes Are the roses always accessible yes Are the sluices on Engine room bulkheads always accessible ✓
 No. of bilge injections one and sizes 2 1/2" Are they connected to condenser, or to circulating pump Circulating Pump
 How are the pumps worked By rocking lever from piston rod crosshead of After Engine.
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the discharge pipes above or below the deep water line above
 Are they each fitted with a discharge valve always accessible on the plating of the vessel yes Are the blow off cocks fitted with a spigot and brass covering plate yes
 What pipes are carried through the bunkers none How are they protected ✓
 Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times yes
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges yes
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock now new launched 11th May 1884
 Is the screw shaft tunnel watertight ✓ and fitted with a sluice door ✓ worked from ✓

BOILERS, &c.—

Number of Boilers one Description Cylindrical dry combustion Chamber Whether Steel or Iron Steel
 Working Pressure 100 lbs Tested by hydraulic pressure to 200 lbs Date of test 11th May 1887
 Description of superheating apparatus or steam chest none fitted
 Can each boiler be worked separately ✓ Can the superheater be shut off and the boiler worked separately ✓
 No. of square feet of fire grate surface in each boiler 16 sq ft Description of safety valves Spring loaded No. to each boiler two
 Area of each valve 3.14 sq" Are they fitted with easing gear yes No. of safety valves to superheater ✓ area of each valve ✓
 Are they fitted with easing gear ✓ Smallest distance between boilers and bunkers or woodwork 8" Diameter of boilers 7.6"
 Length of boilers 7.0" description of riveting of shell long. seams quad riv lap circum. seams alle riv lap Thickness of shell plates 9/16"
 Diameter of rivet holes 13/16" whether punched or drilled drilled pitch of rivets 3 7/8" Lap of plating 4 1/4"
 Percentage of strength of longitudinal joint 77.6 working pressure of shell by rules 100 lbs size of manholes in shell 16 x 12
 No. of compensating rings 24" x 32" x 9/16" No. of Furnaces in each boiler one
 Outside diameter 40" length, top 6.6" bottom 6.6" thickness of plates 9/16" description of joint Welded if rings are fitted ✓
 Greatest length between rings ✓ working pressure of furnace by the rules 100 lbs combustion chamber plating, thickness, sides ✓ back ✓ top ✓
 Pitch of stays to ditto, sides ✓ back ✓ top ✓ If stays are fitted with nuts or riveted heads ✓ working pressure of plating by rules ✓
 Diameter of stays at smallest part ✓ working pressure of ditto by rules ✓ end plates in steam space, thickness 1/16"
 Pitch of stays to ditto 15" how stays are secured Nuts & washers working pressure by rules 100 lbs diameter of stays at smallest part 2"
 working pressure by rules 180 lbs Front plates at bottom, thickness 1/16" Back plates, thickness 1/16"
 Greatest pitch of stays ✓ working pressure by rules 100 lbs Diameter of tubes 3 1/2" pitch of tubes 4 1/2" thickness of tube plates, front 1/16" back 1/16"
 how stayed Stay tubes pitch of stays 15" width of water spaces 1"
 Diameter of Superheater or Steam chest _____ length _____ thickness of plates _____ description of longitudinal joint _____ diam. of rivet holes _____
 Pitch of rivets _____ working pressure of shell by rules _____ diameter of flue _____ thickness of plates _____ If stiffened with rings _____
 Distance between rings _____ working pressure by rules _____ end plates of superheater, or steam chest; thickness _____ how stayed _____
 Superheater or steam chest; how connected to boiler _____

Hul399-0132

DONKEY BOILER— Description *None fitted*

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 _____ if fitted with easing gear _____ if steam from main boilers can enter the donkey boiler _____

diameter of donkey boiler _____ length _____ description of riveting _____

Thickness of shell plates _____ diameter of rivet holes _____ whether punched or drilled _____ pitch of rivets _____ lap of plating _____

per centage of strength of joint _____ thickness of crown plates _____ stayed by _____

Diameter of furnace, top _____ bottom _____ length of furnace _____ thickness of 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 plates _____ thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *Two Top end & two bottom end bolts, two main bearing bolts, one set coupling bolts, one set of Dead and Bilge Pump Valve 12 condenser tubes and gaskets for same. Propeller*

The foregoing is a correct description,
Edward Wales Manufacturer.

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

The Machinery and Boiler of this Vessel intended for towing purposes, have been constructed under Special Survey and placed on board in accordance with the requirements of the Society's Rules. They are now in my opinion in safe working condition. The case is respectfully submitted for the notification L.M.C. 7.87 in the Register Book.

Certificate to be sent to Watkins & Co London

It is submitted that this vessel is eligible to have the notification L.M.C. 7.87 recorded.

R. G. 11/7/87

Centle

The amount of Entry Fee . . . £ 1 : 0 : received ^{at Hull} by me.

Special . . . £ 8 : 0 : *HCA*

Donkey Boiler Fee . . . £ : :

Certificate (if required) . . . £ *ps.* : *11/7/1887*

To be sent as per margin.

James Jones
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute **FRIDAY 22 JULY 1887**

L. M. C.

