

## REPORT ON MACHINERY.

No. 17566

Port of Hull

SAL. 17 FEB 1906

Received at London Office

19

No. in Survey held at Hull Date, first Survey May 19/05 Last Survey 16<sup>th</sup> Feb 1906  
 Reg. Book. 106 Suff. on the Steel S. K. Cleopatra (Number of Visits 43)  
 Master Hull Built at Hull By whom built Messrs Earle's & Co. Ltd Tons {Gross 311  
 Engines made at Hull By whom made Messrs Anos Smith when made 1906  
 Boilers made at Hull By whom made Messrs Anos Smith when made 1906  
 Registered Horse Power 96 Owners Hollings' Steam Fishing Co. Ltd Port belonging to Hull  
 Nom. Horse Power as per Section 28 96 Is Refrigerating Machinery fitted No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3  
 Dia. of Cylinders 14" ~ 23" ~ 38" Length of Stroke 27" Revs. per minute 115 Dia. of Screw shaft 7.91" Material of screw shaft Iron  
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight  
 in the propeller boss Yes If the liner is in more than one length are the joints burned 1 length If the liner does not fit tightly at the port  
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two  
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 40"  
 Dia. of Plain part shaft as per rule 7.18" Dia. of Crank shaft journals as per rule 7.54" Dia. of Crank pin 8" Size of Crank webs 12 1/4" x 5" Dia. of thrust shaft under  
 collars 8" Dia. of screw 9" ~ 9" Pitch of screw 11' 6" to 12' 6" No. of blades 4 State whether moveable No Total surface 30.6 sq ft  
 No. of Feed pumps Two Diameter of ditto 2 5/8" Stroke 18" Can one be overhauled while the other is at work Yes  
 No. of Bilge pumps Two Diameter of ditto 2 5/8" Stroke 18" Can one be overhauled while the other is at work Yes  
 No. of Donkey Engines One Sizes of Pumps 6 1/4" x 6" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps One 2" to fish hold, One 2" to fore peak  
 In Engine Room Two two inches In Holds, &c. One 2" to fish hold, One 2" to fore peak  
 and ejector suction from Eng. Room Bilge hold with discharge on deck Yes  
 No. of bilge injections 1 sizes 4" Connected to condenser, or to circulating pump pump Is a separate donkey suction fitted in Engine room & size Yes 2"  
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes  
 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 hold suction How are they protected wood casing  
 Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times Yes  
 Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges Yes  
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock before launching Is the screw shaft tunnel watertight 0  
 Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 1665 sq ft Is forced draft fitted No  
 No. and Description of Boilers One cyl. Multi Working Pressure 185 lbs Tested by hydraulic pressure to 370 lbs  
 Date of test 22. 11. 05 Can each boiler be worked separately Yes Area of fire grate in each boiler 55 sq ft No. and Description of safety valves to  
 each boiler Two Spring Area of each valve 5.94 sq in Pressure to which they are adjusted 190 lbs Are they fitted with easing gear Yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork 5 1/2" Mean dia. of boilers 14' ~ 0" Length 10' ~ 7 1/2" Material of shell plates Steel  
 Thickness 1 5/32" Range of tensile strength 28 tons Are they welded or flanged Yes Descrip. of riveting: cir. seams L. D. long. seams D. A. S. J. R.  
 Diameter of rivet holes in long. seams 1 9/32" Pitch of rivets 8.72" Lap of plates or width of butt straps 18 3/4"  
 Per centages of strength of longitudinal joint rivets 95. Working pressure of shell by rules 185 lbs Size of manhole in shell 16" x 12"  
 Size of compensating ring 40" x 30" x 1 5/32" No. and Description of Furnaces in each boiler 3 plain Material Steel Outside diameter 41 10/16"  
 Length of plain part top 5' 10 5/8" bottom 5' 10 5/8" Thickness of plates top 49" bottom 64" Description of longitudinal joint Welded No. of strengthening rings 0  
 Working pressure of furnace by the rules 191 lbs Combustion chamber plates: Material Steel Thickness: Sides 1 1/16" Back 1 1/16" Top 1 1/16" Bottom 1 1/16"  
 Pitch of stays to ditto: Sides 8 3/4" x 7 1/2" Back 8" x 8 1/4" Top 7 1/2" x 7 3/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 247 lbs  
 Material of stays Steel Diameter at smallest part 1 1/2" Area supported by each stay 55.21 sq in Working pressure by rules 214 lbs End plates in steam space:  
 Material Steel Thickness 1 1/16" Pitch of stays 18" x 15 1/2" How are stays secured nut in out washer out. Working pressure by rules 191 lbs Material of stays Steel  
 Diameter at smallest part 6.10" Area supported by each stay 279 sq in Working pressure by rules 218 lbs Material of Front plates at bottom Steel  
 Thickness 1 5/16" Material of Lower back plate Steel Thickness 1 5/16" Greatest pitch of stays 14" Working pressure of plate by rules 230 lbs  
 Diameter of tubes 3 1/4" Pitch of tubes 4 3/4" x 4 1/2" Material of tube plates Steel Thickness: Front 1 5/16" Back 27/32" Mean pitch of stays 9 1/4"  
 Pitch across wide water spaces 14" Working pressures by rules 195 lbs Girders to Chamber tops: Material Iron Depth and  
 thickness of girder at centre 9 1/2" x 13 1/4" Length as per rule 2' ~ 10' Distance apart 7 3/4" Number and pitch of Stays in each 3 ~ 7 1/2"  
 Working pressure by rules 200 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked  
 separately Yes Diameter 14" Length 14" Thickness of shell plates 1 1/16" Material Steel Description of longitudinal joint Welded Diam. of rivet  
 holes 1 1/16" Pitch of rivets 8.72" Working pressure of shell by rules 185 lbs Diameter of flue 14" Material of flue plates Steel Thickness 1 1/16"  
 If stiffened with rings Yes Distance between rings 14" Working pressure by rules 195 lbs End plates: Thickness 1 1/16" How stayed Yes  
 Working pressure of end plates 200 lbs Area of safety valves to superheater 14" Are they fitted with easing gear Yes

011149-011160-0130



**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 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 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:—Two each top and bottom end connecting rod bolts and nuts, two main bearing bolts and nuts, one set coupling bolts and nuts, one set each air, circulating feed, and bilge pump valves, a quantity of assorted bolts, nuts etc.

The foregoing is a correct description,

FOR AMOS & SMITH

Manufacturer.

W. S. H. D. E.

MANAGER

Dates During progress of work in shops— 1905:—May 19. June 7. 16. 29. July 5. 7. 13. 19. 24. Aug 16. 21. 24. 28. Sep. 4. 11. 18. 25. Oct. 2. 9. 13. 18. 23. 30. Nov. 6. 15. 20. 22. 27. Dec 4. 8. 12. 23. 28. 29

During erection on board vessel— 1906:—Jan. 1. 6. 9. 10. 11. 17. 18. 23. Feb. 16.

Total No. of visits 43

Is the approved plan of main boiler forwarded herewith Yes

**General Remarks** (State quality of workmanship, opinions as to class, &c. The machinery and boiler) of this vessel have been inspected throughout construction in accordance with the Society's Rules. The material & workmanship are good. The boiler tested by hydraulic pressure and with the engines placed on board and tested under steam they are now in good order and safe working condition, and respectfully submitted as being eligible in my opinion to be classed with the notation of **L.M.C. 2.06** in the Register Book.

It is submitted that this vessel is eligible for THE RECORD L.M.C. 2.06.

M.S.  
17.2.06.  
17.2.06

The amount of Entry Fee. £ 1 : . : . When applied for, 16/2/1906

Special . . . . . £ 14 : 8 : . . . . .

Donkey Boiler Fee . . . . . £ . : . : . When received, 29.2.06

Travelling Expenses (if any) £ . : . : .

James Barclay.  
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.  
16.2.06

Committee's Minute

TUES. 20 FEB 1906

Assigned

+ L.M.C. 2.06

MACHINERY CERTIFICATE WRITTEN.



© 2021

Lloyd's Register Foundation

Certificate (if required) to be sent to Hull.