

REPORT ON MACHINERY.

No. 26389

Received at London Office
 Date of writing Report 18th June 1913 When handed in at Local Office 21.6.13 Port of Hull THU. JUN. 26. 1913
 No. in Survey held at Hull Date, First Survey Oct. 29th Last Survey Jun. 17th 1913.
 Reg. Book 7054 on the Steel sekr. "Sargow" (Number of Visits 41)
 Master Beverley Built at Beverley By whom built Coak. Melton, Samuel & Co. Tons Gross 297
 Engines made at Hull By whom made Amas & Smith Ltd when made 1913. Net 121
 Boilers made at Hull By whom made Amas & Smith Ltd when made 1913.
 Registered Horse Power 89 Owners Standard Steam Fishing Co. Ltd belonging to Grimsby
 Nom. Horse Power as per Section 28 89 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Inverted Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 13 1/2" - 22 1/2" - 37" Length of Stroke 24" Revs. per minute as per rule 7.49 Dia. of Screw shaft as fitted 8" 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 no If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive no If two liners are fitted, is the shaft lapped or protected between the liners no Length of stern bush 3'-0"
 Dia. of Tunnel shaft as per rule 6.75 Dia. of Crank shaft journals as per rule 7.08 Dia. of Crank pin 7 1/2" Size of Crank web 3/4" x 1 1/4" Dia. of thrust shaft under collars 7 1/2" Dia. of screw 9" Pitch of Screw 11-0 No. of Blades 4 State whether moveable No Total surface 29.5-9
 No. of Feed pumps 1 Diameter of ditto 2 7/8" Stroke 12" Can one be overhauled while the other is at work no
 No. of Bilge pumps 1 Diameter of ditto 3" Stroke 12" Can one be overhauled while the other is at work no
 No. of Donkey Engines 2 Sizes of Pumps 6 1/2" x 6" stroke No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2-2" Suctions, 1.2" side in stokehold In Holds, &c. 1.2" suction to forecabin, 1.2" to main fish room, 1.2" to main slush well, 1.2" to spare slush well.
 No. of Bilge Injections 1 sizes 3" Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size 2 1/2" injector.
 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 no
 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 4. 2" hold slush well pipes 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
 Dates of examination of completion of fitting of Sea Connections 16.5.13. of Stern Tube 16.5.13. Screw shaft and Propeller 16.5.13.
 Is the Screw Shaft Tunnel watertight none Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S. Manufacturers of Steel The Parkgate Iron & Steel Co. Ltd
 Total Heating Surface of Boilers 1595 Is Forced Draft fitted No No. and Description of Boilers 1. Steel Multitubular
 Working Pressure 185 lbs. Tested by hydraulic pressure to 370 lbs. Date of test 22.5.13. No. of Certificate 79855
 Can each boiler be worked separately no Area of fire grate in each boiler 47.5 No. and Description of Safety Valves to each boiler 2. Spring-loaded. Area of each valve 5-9" Pressure to which they are adjusted 188 lbs. Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 8" Mean dia. of boilers 13'-6" Length 10'-6" Material of shell plates Steel
 Thickness 1 3/32" Range of tensile strength 29.33. Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D.R. lap.
 long. seams D.R. 5/16" pitch Diameter of rivet holes in long. seams 1 5/32" Pitch of rivets 7 3/4" Lap of plates or width of butt straps 1 1/8"
 Per centages of strength of longitudinal joint rivets 85.9. Working pressure of shell by rules 185. Size of manhole in shell 16" x 12"
 Size of compensating ring 40 x 30 x 1 3/32" No. and Description of Furnaces in each boiler 3 Plain Material Steel Outside diameter 3-3 1/2"
 Length of plain part top 79.5. bottom 74. Thickness of plates crown 4.9. bottom 6.4. Description of longitudinal joint Welded No. of strengthening rings no
 Working pressure of furnace by the rules 190. Combustion chamber plates: Material Steel Thickness: Sides 1/16" Back 1/16" Top 1/16" Bottom 1/16"
 Pitch of stays to ditto: Sides 9 1/2" x 7 1/2" Back 9 1/4" x 9" Top 8 1/2" x 10" If stays are fitted with nuts or riveted heads Nuts. Working pressure by rules 797
 Material of stay Steel Diameter at smallest part 6.1. Area supported by each stay 83 Working pressure by rules 222 End plates in steam space:
 Material Steel Thickness 1 3/32" Pitch of stays 17 x 15. How are stays secured nut washers Working pressure by rules 748. Material of stays Steel
 Diameter at smallest part 6.10 Area supported by each stay 255 Working pressure by rules 748 Material of Front plates at bottom Steel
 Thickness 1" Material of Lower back plate Steel Thickness 1/16" Greatest pitch of stays 9 1/8" x 14 1/4" Working pressure of plate by rules 211.
 Diameter of tubes 3 1/4" Pitch of tubes 48 x 14 1/2" Material of tube plates Steel Thickness: Front 1" Back 3/32" Mean pitch of stays 9 1/4" x 9."
 Pitch across wide water spaces 14 1/4" Working pressures by rules 189. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9 1/2" x 1 3/4" Length as per rule 2-10" Distance apart 10" Number and pitch of stays in each 3W 8 1/2"
 Working pressure by rules 194. Superheater or Steam chest; how connected to boiler 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

Im. 2, 12. 7.

VERTICAL DONKEY BOILER— Manufacturers of Steel

No. _____ Description _____

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 _____ Date of adjustment _____

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 _____ Dates of survey _____

SPARE GEAR. State the articles supplied: *Two nuts & nuts for connecting rod top ends. Two bolts & nuts for connecting rod bottom ends. Two main bearing bolts. One set of shaft coupling bolts. One set each feed and bilge valves, iron of different sizes. quantity of assorted bolts & nuts etc.*

The foregoing is a correct description,

Manufacturer. *W. S. Wells* Managing Director.

Dates of Survey while building: During progress of work in shops -- 1912. Oct. 29. Dec. 5. 10. 13. 16. 19. 23. 1913. *Jan 6. 15. 27 Feb 8. 12. 18. 20. 28. Mar 5. 7. 8. 13. 14*
 During erection on board vessel --- *Mar 19. 27. Apr. 7. 8. 12. 15. 22. 24. 29. May 4. 9. 16. 21. 27. Jun 4. 9. 10. 11. 17.*
 Total No. of visits *41*

Is the approved plan of main boiler forwarded herewith *Rpt 26349*

Dates of Examination of principal parts—Cylinders *10.6.13.* Slides *10.6.13.* Covers *10.6.13.* Pistons *10.6.13.* Rods *10.6.13.*
 Connecting rods *11.6.13.* Crank shaft *4.5.13.* Thrust shaft *4.5.13.* Tunnel shafts *✓* Screw shaft *1.4.13.* Propeller *1.4.15.*
 Stern tube *14.13.* Steam pipes tested *10.6.13.* Engine and boiler seatings *10.6.13.* Engines holding down bolts *10.6.13.*
 Completion of pumping arrangements *10.6.13.* Boilers fixed *10.6.13.* Engines tried under steam *11.6.13.*
 Main boiler safety valves adjusted *11.6.13.* Thickness of adjusting washers *SV 1 3/32" PV 3/8"*

Material of Crank shaft *Steel* Identification Mark on Do. *1063.* Material of Thrust shaft *Steel* Identification Mark on Do. *1063.*
 Material of Tunnel shafts *✓* Identification Marks on Do. *Iron.* Material of Screw shafts *Iron.* Identification Marks on Do. *1063.*
 Material of Steam Pipes *Solid drawn copper.* Test pressure *380 lbs.*

General Remarks (State quality of workmanship, opinions as to class, &c. *The Engines & Boiler of this vessel have been constructed under special survey in accordance with the rules. The materials & workmanship are sound & good. The boiler tested by hydraulic pressure, and with the engines secured on board & tested under steam. They are now in good order & safe working condition, and respectfully submitted as being eligible in my opinion to be classed with the notation of LMC 6.13. in the Register book*

It is submitted that this vessel is eligible for THE RECORD. + LMC 6.13.

SJF
26.6.13
ARR

The amount of Entry Fee £ 1 : 0 : 0 When applied for. *24.6.13*
 Special .. £ 13 : 7 : 0
 Donkey Boiler Fee £ : : :
 Travelling Expenses (if any) £ : 1 : 0 When received. *30.5.13*

J. G. Mackillop
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

FRI. JUN. 27. 1913

Committee's Minute

Assigned *Lmc 6.13*

MACHINERY CERTIFICATE WRITTEN



Certificate (if required) to be sent to Hull.

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