

Rpt. 4. **REPORT ON MACHINERY.** No. 19570

Port of Hull

Received at London Office **FRI. 8 NOV 1907**

No. in Survey held at Hull Date, first Survey Apr. 26th Last Survey Oct. 25th 1907

Reg. Book. 180 on the 1/2 Trawler - Oshello (Number of Visits 30)

Master Selby Built at Selby By whom built Bochrane & Pms. Tons { Gross 201 Net 94

Engines made at Hull By whom made Chas. D. Holmes & Co. when made 1907-10.

Boilers made at Hull By whom made Hull when made Hull

Registered Horse Power - Owners A. Bannister Port belonging to Grimby

Nom. Horse Power as per Section 28 67 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted No.

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 12-21-34 Length of Stroke 24 Revs. per minute 112 Dia. of Screw shaft 6.9 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 Yes 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 Yes If two liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 31

Dia. of Tunnel shaft 6.25 Dia. of Crank shaft journals 6.5 Dia. of Crank pin 6.2 Size of Crank webs 17x12.5 Dia. of thrust shaft under collars 6.25 Dia. of screw 8-6 Pitch of Screw 11-0 No. of Blades 4 State whether moceable No Total surface 27.2

No. of Feed pumps 1 Diameter of ditto 28 Stroke 21 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 1 Diameter of ditto 28 Stroke 21 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Sizes of Pumps (2 3/4 x 5) (2 3/4 x 4 1/2) No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 2-2 (7/8" & 1") In Holds, &c. 2-2 (1" & 1 1/2")

No. of Bilge Injections 1 sizes 2 3/4 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 2 3/4

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 stowhold 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 Hot suction How are they protected Wire 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 24.7.07 of Stern Tube 24.7.07 Screw shaft and Propeller 24.7.07

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Yes

BOILERS, &c.—(Letter for record Yes) Manufacturers of Steel Messrs. Dana & Co. Ltd., Middlesbrough

Total Heating Surface of Boilers 11104 Is Forced Draft fitted No No. and Description of Boilers 1, S.E. 91 Ultramarine

Working Pressure 180 lb. Tested by hydraulic pressure to 360 lb. Date of test 9.10.07 No. of Certificate 1600

Can each boiler be worked separately Yes Area of fire grate in each boiler 31.3 No. and Description of Safety Valves to each boiler 2 Spring Loaded Area of each valve 3.9 Pressure to which they are adjusted 180 lb. Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 7 Mean dia. of boilers 12-0 Length 10-0 Material of shell plates Steel

Thickness 1 Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams S.R. Lap

long. seams S.B.S. Rivet Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 7 Lap of plates or width of butt straps 15

Per centages of strength of longitudinal joint rivets 88.7 Working pressure of shell by rules 180 Size of manhole in shell 16x12

plate 85.2 Size of compensating ring 7x1 No. and Description of Furnaces in each boiler 2 Holmes Material Steel Outside diameter 3-5

Length of plain part top Yes Thickness of plates crown 3 1/2 Description of longitudinal joint Welded No. of strengthening rings -

bottom Yes Working pressure of furnace by the rules 195 Combustion chamber plates: Material Steel Thickness: Sides 4/8 Back 4/8 Top 3/8 Bottom 4/8

Pitch of stays to ditto: Sides 9x8 1/2 Back 9x8 1/2 Top 8 1/2 x 8 If stays are fitted with nuts or riveted heads Yes Working pressure by rules 201

Material of stays Steel Diameter at smallest part 1 3/4 Area supported by each stay 105.75 Working pressure by rules 204 End plates in steam space: Material Steel Thickness 1 1/2 Pitch of stays 16x16 How are stays secured Washer Working pressure by rules 196 Material of stays Steel

Diameter at smallest part 5.78 Area supported by each stay 256 Working pressure by rules 225 Material of Front plates at bottom Steel

Thickness 3/8 Material of Lower back plate Steel Thickness 1 1/8 Greatest pitch of stays 15 Working pressure of plate by rules 198

Diameter of tubes 3 1/2 Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates Steel Thickness: Front 3/8 Back 7/8 Mean pitch of stays 9 1/2

Pitch across wide water spaces 15 Working pressures by rules 180 Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 9x12 Length as per rule 2'9 1/2 Distance apart 8 Number and pitch of stays in each 20 8 1/2

Working pressure by rules 199 Superheater or Steam chest; how connected to boiler 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 stayed

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

Lloyd's Register Foundation

1510-5011M

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 _____ Stayed by _____
 Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— *Two top & two bottom end connecting rods & nuts, two main bearing trees, one set of coupling tree & nuts, one set of feed & high pump valves, one main & one donkey feed check valve, Assorted trees & nuts.*

The foregoing is a correct description,

PER PRO CHARLES D. HOLMES & Co.

Manufacturer.

H. Allon

Dates of Survey while building { During progress of work in shops - } 1907: Apr 26 Jun 6, 14, 28, Jul 9, 17, 20, 24, 26, 30, Aug 9, 20, 28, Sep 5, 14, 17, 21, 25, 28.
 { During erection on board vessel - } Oct 1, 5, 7, 9, 14, 15, 18, 19, 22, 23, 25
 Total No. of visits 30

Is the approved plan of main boiler forwarded herewith *yes*

Dates of Examination of principal parts—Cylinders 7.10.07 Slides 7.10.07 Covers 7.10.07 Pistons 1.10.07 Rods 1.10.07
 Connecting rods 7.10.07 Crank shaft 7.10.07 Thrust shaft 28.8.07 Tunnel shafts ✓ Screw shaft 20.7.07 Propeller 20.7.07
 Stern tube 20.7.07 Steam pipes tested 22.10.07 Engine and boiler seatings 24.7.07 Engines holding down bolts 19.10.07
 Completion of pumping arrangements 23.10.07 Boilers fixed 19.10.07 Engines tried under steam 23.10.07
 Main boiler safety valves adjusted 23.10.07 Thickness of adjusting washers *F 3/4 A 1/2*
 Material of Crank shaft *Iron* Identification Mark on Do. *354 J.H.G 7.10.07* Material of Thrust shaft *Iron* Identification Mark on Do. *354 J.H.G 7.10.07*
 Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts *Iron* Identification Marks on Do. *354 J.H.G 20.7.07*
 Material of Steam Pipes *Solid drawn copper* Test pressure *360 lbs.*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery & trial of this vessel have been completed under Special Survey, and of good material & workmanship, & have been found to be in accordance with the Rules. They are now in good working condition & eligible in my opinion to have the Notation -i- L. M. C. 10.07 in the Register Book.*

It is submitted that this vessel is eligible for REG. RECORD + L.M.C. 10.07
J.P.M. 8/11/07
R.S. 8.11.07

The amount of Entry Fee.. £ 7 : : : When applied for.
 Special £ 10 : 1 : : 7/11/07
 Donkey Boiler Fee £ : : : When received, 29/11/07
 Travelling Expenses (if any) £ : : : 30/11/07

John L. Gwynne
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute
 Assigned *+ L.M.C. 10.07*

TUES, 12 NOV 1907



Certificate (if required) to be sent to

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