

## REPORT ON MACHINERY.

No. 16783

Port of *Hull*

Received at London Office

MAY 10 1905

No. in Survey held at *Hull* Date, first Survey *Jan 11<sup>th</sup>* Last Survey *May 5<sup>th</sup> 1905*  
 Reg. Book. *21 Supp* on the *Sc. K. Vesta* (Number of Visits *32*) Tons { Gross *240*  
 Master *Selby* Built at *Selby* By whom built *Bochane Sons* When built *1905*  
 Engines made at } *Hull* By whom made } *Messrs Charles D. Holmes & Co.* when made } *1905*  
 Boilers made at } *Hull* By whom made } *Messrs Charles D. Holmes & Co.* when made } *1905*  
 Registered Horse Power *69-670* Owners *Grimsby Atlas Steam Fishing Co. Ltd.* Port belonging to *Grimsby*  
 Nom. Horse Power as per Section 28 *69-670* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *No*

ENGINES, &c.—Description of Engines *See Compound* No. of Cylinders *3* No. of Cranks *3*  
 Dia. of Cylinders *12 1/4" ~ 2 1/2" ~ 35"* Length of Stroke *24"* Revs. per minute *112* Dia. of Screw shaft *7 1/4"* Material of screw shaft *Steel*  
 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 *burned* 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 *2'-7"*  
 Dia. of *plain* shaft as per rule *6 3/8"* Dia. of Crank shaft journals as per rule *6 6/8"* Dia. of Crank pin *6 1/8"* Size of Crank webs *13 1/16" x 4 5/8"* Dia. of thrust shaft under  
 collars *6 1/8"* Dia. of screw *8'-6"* Pitch of screw *10'-6" to 11'-6"* No. of blades *4* State whether moveable *No* Total surface *28 sq*  
 No. of Feed pumps *One* Diameter of ditto *2 1/8"* Stroke *24"* Can one be overhauled while the other is at work  
 No. of Bilge pumps *One* Diameter of ditto *2 1/8"* Stroke *24"* Can one be overhauled while the other is at work  
 No. of Donkey Engines *One* Sizes of Pumps *2 3/4" x 5"* No. and size of Suctions connected to both Bilge and Donkey pumps  
 In Engine Room *Two two inches* In Holds, &c. *One 2" to slush well, One 2" to*  
*hold, Ejector suction from E.R. Bilge holds with discharge on deck*  
 No. of bilge injections *1* sizes *3"* Connected to condenser, or to circulating pump *pumps* 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 *None*  
 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 *None*  
 Is it fitted with a watertight door *worked from*

BOILERS, &c.—(Letter for record *8*) Total Heating Surface of Boilers *1135 sq* Is forced draft fitted *No*  
 No. and Description of Boilers *One cyl. Multi* Working Pressure *180 lbs* Tested by hydraulic pressure to *360 lbs*  
 Date of test *12-4-05* Can each boiler be worked separately *Yes* Area of fire grate in each boiler *33 sq* No. and Description of safety valves to  
 each boiler *Two Spring* Area of each valve *3.9 sq* Pressure to which they are adjusted *185 lbs* Are they fitted with easing gear *Yes*  
 Smallest distance between boilers or uptakes and bunkers or woodwork *5"* Mean dia. of boilers *12'-6"* Length *10'-0"* Material of shell plates *Steel*  
 Thickness *1 1/2"* Range of tensile strength *39-32* Are they welded or flanged *Yes* Descrip. of riveting: cir. seams *LD* long. seams *DBSJR*  
 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 *86.5* Working pressure of shell by rules *185 lbs* Size of manhole in shell *16" x 12"*  
 Size of compensating ring *7" x 1 1/2"* No. and Description of Furnaces in each boiler *Two Holmes* Material *Steel* Outside diameter *41"*  
 Length of plain part top *7"* Thickness of plates crown *1 1/16"* Description of longitudinal joint *Welded* No. of strengthening rings *4 Corr.*  
 bottom *7"* bottom *1 1/16"* Working pressure of furnace by the rules *198 lbs* Combustion chamber plates: Material *Steel* Thickness: Sides *2 3/16"* Back *1 1/16"* Top *2 3/32"* Bottom *2 3/32"*  
 Pitch of stays to ditto: Sides *8 1/2" x 9"* Back *9" x 8 1/2"* Top *8 1/2"* If stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *207 lbs*  
 Material of stays *Steel* Diameter at smallest part *1 5/8"* Area supported by each stay *78 3/4 sq* Working pressure by rules *236 lbs* End plates in steam space:  
 Material *Steel* Thickness *1 1/16"* Pitch of stays *16" x 16"* How are stays secured *Q. & W.* Working pressure by rules *208 lbs* Material of stays *Steel*  
 Diameter at smallest part *5 7/16"* Area supported by each stay *256 sq* Working pressure by rules *225 lbs* Material of Front plates at bottom *Steel*  
 Thickness *7/8"* Material of Lower back plate *Steel* Thickness *1 5/16"* Greatest pitch of stays *14 3/4"* Working pressure of plate by rules *197 lbs*  
 Diameter of tubes *3 1/4"* Pitch of tubes *4 1/2"* Material of tube plates *Steel* Thickness: Front *7/8"* Back *7/8"* Mean pitch of stays *9"*  
 Pitch across wide water spaces *15"* Working pressures by rules *180 lbs* Girders to Chamber tops: Material *Iron* Depth and  
 thickness of girder at centre *8 3/4" x 13"* Length as per rule *2'-8 1/4"* Distance apart *8"* Number and pitch of Stays in each *3 8 1/2"*  
 Working pressure by rules *180 lbs* 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 plates to superheater Are they fitted with easing gear



## 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

Plates

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

The foregoing is a correct description,

Charles D. Holmes  
Manufacturer.

Dates { During progress of work in shops - 1905: Jan 11. 18. 20. 25 Feb. 2. 15. 27 Mar. 2. 7. 8. 9. 13. 14. 17. 18. 22. 23. 28 Apr. 4. 5. 11. 12  
of Survey { During erection on board vessel - Apr. 13. 14. 18. 27. 28 May 1. 2. 3. 5.  
while building { Total No. of visits 32

Is the approved plan of main boiler forwarded herewith

No  
sent with  
Feb. Rpt. 10  
16728

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery boiler of this vessel have been inspected throughout construction in accordance with the Society's Rules. The materials workmanship are good. The boiler tested by hydraulic pressure, and with the engine placed on board & 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  $\frac{1}{2}$  L. M. C. 5.05 in the Register Book.

This is a sister vessel to the "Ulverston" Hull Report No. 16728.

It is submitted that  
this vessel is eligible for  
THE RECORD L.M.C. 5.05

10.5.05

10.5.05

The amount of Entry Fee. £ 1 : : : When applied for,  
Special .. £ 10 : 10 : : 9/5/1905  
Donkey Boiler Fee .. £ : : : When received,  
Travelling Expenses (if any) £ : : : 31.5.05

Committee's Minute

FRI. 12 MAY 1905

ned

MACHINERY CERTIFICATE  
WRITTEN



© 2021

Lloyd's Register  
Foundation