

REPORT ON MACHINERY.

No. 3429

Received at London Office

21 OCT 1924

Date of writing Report *October 18th 1924* When handed in at Local Office

19

Port of

*Milford*No. in Survey held at
Reg. Book.*Milford*Date, First Survey *September 11th* Last Survey *October 14th 1924*

(Number of Visits

Gross
Tons
Net

60237 on the Steam Trawler "William Downes"

Master *James* Built at *South Shields* By whom built *G. Remondson & Co.*When built *1914*Engines made at *North Shields* By whom made *Shields Eng & Dry Dock Co. Ltd*when made *1914*Boilers made at *James* By whom made *Palmer S.B. Co. Ltd.*when made *1914*

Registered Horse Power

Owners *Phoenix Trawling Co. Ltd. R.D.T. Port* Port belonging to *London*Nom. Horse Power as per Section 28 *46*Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *No*MACHINES, &c.—Description of Engines *Triple Expn. Surface Condensing* No. of Cylinders *3* No. of Cranks *3*Dia. of Cylinders *12 1/2 - 21 - 35* Length of Stroke *26* Revs. per minute *110* Dia. of Screw shaft as per rule *7 3/4* Material of screw shaft as fitted *4 1/2*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 tightthe 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 partbetween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *Yes* If twoliners are fitted, is the shaft lapped or protected between the liners *Yes* Length of stern bush *34*Dia. of Tunnel shaft as per rule *4 1/2* Dia. of Crank shaft journals as per rule *6 9/16* Dia. of Crank pin *4 1/8* Size of Crank webs *4 1/2* Dia. of thrust shaft underbars *4 1/8* Dia. of screw *9 - 6* Pitch of Screw *11 - 0* No. of Blades *4* State whether moveable *No* Total surface *35 sq*No. of Feed pumps *2* Diameter of ditto *2 1/2* Stroke *12* Can one be overhauled while the other is at work *Yes*No. of Bilge pumps *2* Diameter of ditto *2 1/2* Stroke *12* Can one be overhauled while the other is at work *Yes*No. of Donkey Engines *2* Sizes of Pumps *6 x 3 x 6 1/2 6 x 4 x 6 1/2* No. and size of Suctions connected to both Bilge and Donkey pumpsEngine Room *3 - 2* In Holds, &c. *1 - 2 from Fore Hold, 1 - 2 from Slushwell*No. of Bilge Injections *1* sizes *3 1/2* Connected to condenser, or to circulating pump *C. Pump* Is a separate Donkey Suction fitted in Engine room & size *12. 2. 24*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*That pipes are carried through the bunkers *Toward Suctions* How are they protected *Wood Casings*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*Is the Screw Shaft Tunnel watertight *NONE* Is it fitted with a watertight door *Yes* worked from *Yes*BOILERS, &c.—(Letter for record *Yes*) Manufacturers of Steel *James*Total Heating Surface of Boilers *1276* Is Forced Draft fitted *No* No. and Description of Boilers *One Single Ended*Working Pressure *180 lbs* Tested by hydraulic pressure to *360 lbs* Date of test *4. 10. 17* No. of Certificate *2219.B.C.*Is each boiler worked separately *Yes* Area of fire grate in each boiler *55 sq* No. and Description of Safety Valves to *1*Each boiler *2 Spring Loaded* Area of each valve *4. 9. 5* Pressure to which they are adjusted *180 lbs* Are they fitted with easing gear *Yes*Smallest distance between boilers or uptakes and bunkers or woodwork *9 inches* Mean dia. of boilers *13. 4. 1/2* Length *10. 6* Material of shell plates *Steel*Thickness *7/16* Range of tensile strength *50,000* Are the shell plates welded or flanged *Flanged* Descrip. of riveting: riv. seams *D.R. LAP.*Riv. seams *DOUBLE BUTT* Diameter of rivet holes in long. seams *1. 5/16* Pitch of rivets *8* Lap of plates or width of butt straps *14 1/2*Percentage of strength of longitudinal joint *86.7* Working pressure of shell by rules *184.4 lbs* Size of manhole in shell *16 x 12*Size of compensating ring *32 x 28* No. and Description of Furnaces in each boiler *3 Plain* Material *Steel* Outside diameter *3. 4*Length of plain part *6. 0* Thickness of plates *1. 1/16* Description of longitudinal joint *Welded* No. of strengthening rings *1*Working pressure of furnace by the rules *200* Combustion chamber plates: Material *Steel* Thickness: Sides *1/16* Back *1/16* Top *1/16* Bottom *1/8*Pitch of stays to ditto: Sides *9 1/2 x 9 1/2* Back *9 1/2 x 8* Top *10 x 8 1/2* If stays are fitted with nuts or riveted heads *NUTS* Working pressure by rules *180*Material of stays *Steel* Area at smallest part *1. 91* Area supported by each stay *90. 26* Working pressure by rules *190.4* End plates in steam space:Material *Steel* Thickness *1/8* Pitch of stays *16 1/2 x 18* How are stays secured *DOUBLE NUTS* Working pressure by rules *194* Material of stays *Steel*Area at smallest part *6. 49* Area supported by each stay *303. 75* Working pressure by rules *222* Material of Front plates at bottom *Steel*Thickness *1* Material of Lower back plate *Steel* Thickness *1* Greatest pitch of stays *14 1/2 x 9 1/2* Working pressure of plate by rules *230*Diameter of tubes *3 1/2* Pitch of tubes *4 3/4* Material of tube plates *Steel* Thickness: Front *1* Back *1/8* Mean pitch of stays *9 1/2*Pitch across wide water spaces *14* Working pressures by rules *182.8* Girders to Chamber tops: Material *Steel* Depth andThickness of girder at centre *8 1/2 x 1 1/4* Length as per rule *33* Distance apart *8 1/2* Number and pitch of stays in each *2 - 10*Working pressure by rules *208.7* Steam dome: description of joint to shell *Yes* % of strength of joint *Yes*Diameter *Yes* Thickness of shell plates *Yes* Material *Yes* Description of longitudinal joint *Yes* Diam. of rivet holes *Yes*Pitch of rivets *Yes* Working pressure of shell by rules *Yes* Crown plates *Yes* Thickness *Yes* How stayed *Yes*SUPERHEATER. Type *Yes* Date of Approval of Plan *Yes* Tested by Hydraulic Pressure to *Yes*Date of Test *Yes* Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler *Yes*Diameter of Safety Valve *Yes* Pressure to which each is adjusted *Yes* Is Easing Gear fitted *Yes*

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W137-0067

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two top and bottom bolts, Two bottom end bolts, Two main bearing bolts, One set of air, feed, & bilge pump valves, One safety valve spring, Three escape valve springs, Two feed escape valve springs, 6 Condenser tubes, Four boiler tubes, Six tube stoppers, One main check valve, One bowing check valve.

Spare gear for wheel and windlass, and a full set of tools, spanners, and sticks & dies.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - During ^{Survey} on board vessel - - Total No. of visits

September 11th 12th 13th 16th 20th October 16th 17th

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 12.9.24 Slides 12.9.24 Covers 12.9.24 Pistons 12.9.24 Rods 12.9.24

Connecting rods 12.9.24 Crank shaft 11.9.24 Thrust shaft 11.9.24 Tunnel shafts 11.9.24 Screw shaft 11.9.24 Propeller 11.9.24

Stern tube 11.9.24 Steam pipes tested ✓ Engine and boiler seatings 6.10.24 Engines holding down bolts 12.9.24

Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam 17.10.24.

Completion of fitting sea connections ✓ Stern tube ✓ Screw shaft and propeller ✓

Main boiler safety valves adjusted 17.10.24 Thickness of adjusting washers P 1/4 S 5/16

Material of Crank shaft ✓ Identification Mark on Do. ✓ Material of Thrust shaft ✓ Identification Mark on Do. ✓

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts ✓ Identification Marks on Do. ✓

Material of Steam Pipes Copper ✓ Test pressure ✓

Is an installation fitted for burning oil fuel No ✓ Is the flash point of the oil to be used over 150°F. ✓

Have the requirements of Section 49 of the Rules been complied with ✓

Is this machinery duplicate of a previous case Yes ✓ If so, state name of vessel "John Bullock" ✓

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel, also the boiler

have been examined, whilst being re-conditioned at Milford, and everything found or made efficient.

Repairs. New Retaining Ring fitted to stem bush. Main Stop Valve, Feed Check Valve and Blow down Valve skimmed in lathe and ground in. Top and Bottom Ends rebuffed.

Two white metal shoes fitted to thrust. Bilge Pump plungers skimmed up and new neck and gland bushes fitted.

The machinery of this vessel is in a good safe working condition, and in my opinion eligible to have Rotation of LMC 10.24. and Tailend seen 9.24.

Castle Class
Admiralty Transcripts

It is submitted that
this vessel is eligible for
THE RECORD. LMC 10.24. CL.

5.9.24.

JWD.
25/10/24.

John Stocks
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ : : When applied for,
Special ... £ : : 19
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : : 19

Committee's Minute FRI. 7 NOV 1924

Assigned

Lt. 10.24
C.L.

CERTIFICATE WRITTEN.



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