

REPORT ON MACHINERY

No. 19406
SAT. DEC. 20, 1919

Received at London Office

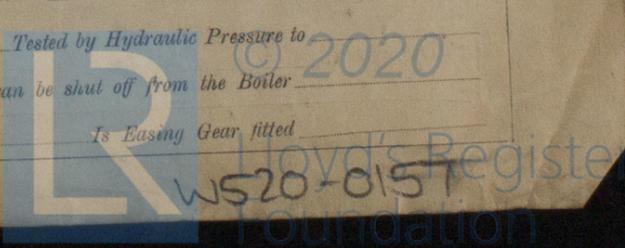
Date of writing Report 15 Dec 1919 When handed in at Local Office 19 Port of Newport News
 No. in Survey held at 6 Cheslow Date, First Survey 1 Sept Last Survey 11 Dec 1919
 Reg. Book. on the S/S War Trench (Number of Visits 7) Tons } Gross 3080
 } Net 1857
 Master Built at Cheslow By whom built E. Smith & Co (1916) Ltd When built 1919
 Engines made at Glasgow By whom made D. Rowan & Co (No 712) when made 1919
 Boilers made at Do By whom made Balcock & Wilson (No 425 #86) when made 1919
 Registered Horse Power Owners Shipping Controller Port belonging to London
 Nom. Horse Power as per Section 28 513 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines In Gls Rpt No 38574 No. of Cylinders No. of Cranks
 Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft as per rule / as fitted Material of screw shaft
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube 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 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 If two
 liners are fitted, is the shaft lapped or protected between the liners Length of stern bush
 Dia. of Tunnel shaft as per rule / as fitted Dia. of Crank shaft journals as per rule / as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under
 collars Dia. of screw Pitch of Screw No. of Blades State whether moveable Total surface
 No. of Feed pumps 2 Diameter of ditto 4 1/2" Stroke 21" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 3 1/2" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes of Pumps 10 1/2" & 1 1/2" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 1 3" & 2 3" Stokes In Holds, &c. No. 1, 3" P. 3" No. 2, 3" P. 3" Cross breaker
P. 3" S. 3" No. 3, P. 3" S. 3" No. 4, P. 2 1/2" S. 2 1/2" After hull 3 1/2" Tunnel with 2 1/2"
 No. of Bilge Injections / sizes 8" Connected to condenser or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3 1/2"
 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 Valves except blow down cocks except main dis.
 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 all 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 bilge suction 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 Yes Is it fitted with a watertight door Yes worked from Eng. Top platform
See Gls Rpt No 39825

BOILERS, &c.—(Letter for record) Manufacturers of Steel assisted
 Total Heating Surface of Boilers 8269 sq ft Is Forced Draft fitted Yes No. and Description of Boilers 3 Balcock Wilson WT Marine
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 6.11.19/1/19 No. of Certificate No. 6798
 Can each boiler be worked separately Yes Area of fire grate in each boiler 84.5 sq ft No. and Description of Safety Valves to
 each boiler 2 Spring loaded Area of each valve 3 3/8" 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 6' 0" Mean dia. of boilers Length Material of shell plates
 Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams
 long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps
 Per centages of strength of longitudinal joint rivets / plate Working pressure of shell by rules Size of manhole in shell
 Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter
 Length of plain part top / bottom Thickness of plates crown / bottom Description of longitudinal joint No. of strengthening rings
 Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom Working pressure by rules
 Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules End plates in steam space:
 Material of stays Area at smallest part Area supported by each stay Working pressure by rules Material of stays
 Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of Front plates at bottom
 Area at smallest part Area supported by each stay Working pressure by rules Working pressure of plate by rules
 Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules
 Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays
 Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and
 thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each % of strength of joint
 Working pressure by rules Steam dome: description of joint to shell Diam. of rivet holes
 Diameter Thickness of shell plates Material Description of longitudinal joint Thickness How stayed
 Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to
 Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
 Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

Forecastle 28.5
 k.
 s to be given as
 20, 24, July 1919
 2, Dec. 4, 11, 1919
 16, 23, June 2, 1919
 3, 14, 26
 No. of Visits 78



IS A DONKEY BOILER FITTED? *Yes* If so, is a report now forwarded? *Yes see the Rpt No.*

SPARE GEAR. State the articles supplied:— *One propeller 2 Coz: and top end bolts & nuts, 2 bottom end 2 main bearing bolts nuts, one set of coupling bolts and set of washers for duplex feed pumps & helix pumps. & spare gear as per amended specifications*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building: During progress of work in shops -- 1919 Sept 1 Nov 6. 11. 19. 20, Dec 6th + 11th
 During erection on board vessel --- 7
 Total No. of visits 7

Is the approved plan of main boiler forwarded herewith *No*
 " " " donkey " " " *Yes*

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods
 Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller
 Stern tube *1 Sept* Steam pipes tested *25 Nov* Engine and boiler seatings *6 Nov* Engines holding down bolts *6 Nov*
 Completion of pumping arrangements *6 Dec* Boilers fixed *6 Nov* Engines tried under steam *6 Nov*
 Completion of fitting sea connections *1 Sept* Stern tube *1 Sept* Screw shaft and propeller *1 Sept*
 Main boiler safety valves adjusted *6 Dec* Thickness of adjusting washers *Shank P 1/2 S 7/8 Centre P 1/2 S 1/2 Port P 1/2 S 1/2*
 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 *Steel* Test pressure *570 lbs sq*
 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 *Yes*
 Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *War Forest Rpt Rpt 1913*

General Remarks (State quality of workmanship, opinions as to class, &c. *The Machinery has now been fitted on board War Forest under steam & found satisfactory & is now eligible for the Record of 7/8 L.M.C. 12.19*

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 12.19. F.D.

3 WATER TUBE BOILERS Subject to the Water Tube Boilers being surveyed annually.

JWD *23/12/19* *ARJ*

Installation £4714.0.0
Boiler Fee £14.0.0

The amount of Entry Fee ... £ : : When applied for, *16 Dec 1919*
 Special ... £ : : *Thos M. Gibson*
 Donkey Boiler Fee ... £ : : When received, *23/12/19*
 Travelling Expenses (if any) £ : : *ARJ*
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute
 Assigned *TUE 30 DEC 1919*
+ Lib 12.19
Water tube Boilers
F.D.



Certificate (if required) to be sent to
 This Surveyors are requested not to write on or below the space for Committee's Minute.