

REPORT ON MACHINERY.

No. 2914
WED. AUG. 18 1920

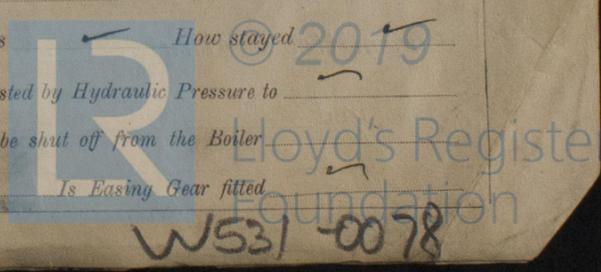
Received at London Office
 Date of writing Report 10 Aug 1920 When handed in at Local Office 10 Port of Melvor
 Date, First Survey 1st June Last Survey 11 June 1920
 on the ST "Cherwell" et Thomas Robins (Number of Visits 1)
 Master W H Francham Built at Middlesb'ro By whom built Smiths Dock Co L^{td} Tons 275
 Engines made at Middlesb'ro By whom made Smiths Dock Co L^{td} when made 1917
 Boilers made at Middlesb'ro By whom made Palmer's S & I Co L^{td} when made 1917
 Registered Horse Power _____ Owners _____ Port belonging to _____
 Net Horse Power as per Section 28 87 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

GINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12 1/2 x 21 x 35 Length of Stroke 26 Revs. per minute 110 Dia. of Screw shaft 7 5/8 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 Yes
 Is 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 Yes
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes If two Yes
 shafts are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 34"
 Dia. of Tunnel shaft 6.5 as per rule 6.9 Dia. of Crank shaft journals 6.9 as per rule 7 1/8 Dia. of Crank pin 7 1/8 Size of Crank webs 14 1/2 x 4 1/2 Dia. of thrust shaft under 7 1/8
 Dia. of screw 9.6 Pitch of Screw 11-12 No. of Blades 4 State whether moceable No Total surface 35.5 sq ft
 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 Suction Sizes of Pumps 6x3x6, 8x4x6 No. and size of Suctions connected to both Bilge and Donkey pumps one from fore hold, 19 inch
 Engine Room 1.2' for 2" Ast. & 2" Sep. in holds, &c. one from fore hold, 19 inch
 Are there also separate ejectors from all parts Yes
 Bilge Injections 1 sizes 3 1/2 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 19 inch
 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
 Are pipes carried through the bunkers Forward 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 Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 Is Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Yes

ERS, &c.—(Letter for record S) Manufacturers of Steel _____
 Heating Surface of Boilers 1619 Is Forced Draft fitted No No. and Description of Boilers Cylindrical, Mut. 2
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 Date of test 26-4-17 No. of Certificate 25-21
 Can boiler be worked separately Yes Area of fire grate in each boiler 50 sq ft No. and Description of Safety Valves to 2 Spring loaded
 Area of each valve 4.9 Pressure to which they are adjusted 183 Are they fitted with easing gear Yes
 Distance between boilers or uptakes and bunkers or woodwork 7 Int. dia. of boilers 162 Length 10.5 Material of shell plates S
 Range of tensile strength 28.32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams double
 Diameter of rivet holes in long. seams 1 5/32 Pitch of rivets 8" Lap of plates or width of butt straps 17"
 Working pressure of shell by rules 180 lbs Size of manhole in shell 16" x 12"
 No. and Description of Furnaces in each boiler 3 plain Material S Outside diameter 40 9/16
 Thickness of plates 32 Description of longitudinal joint Welded No. of strengthening rings 1
 Working pressure of furnace by the rules 188 Combustion chamber plates: Material S Thickness: Sides 11/16 Back 21/32 Top 11/16 Bottom 7/8
 Working pressure by rules 181 If stays are fitted with nuts or riveted heads Nuts
 Area at smallest part 2.07 Area supported by each stay 90.25 Working pressure by rules 206 End plates in steam space: S
 Working pressure by rules 181 Material of stays S
 Working pressure by rules 215 Material of Front plates at bottom S
 Working pressure of plate by rules 219
 Material of tube plates S Thickness: Front 31/32 Back 7/8 Mean pitch of stays 10"
 Working pressures by rules 184 Girders to Chamber tops: Material S Depth and 14"
 Working pressure by rules 197 Steam dome: description of joint to shell Yes % of strength of joint —
 Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet holes —
 Working pressure of shell by rules — Crown plates — Thickness — How stayed —

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

W531-0078



IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

4 top end bolts, and nuts
2 bottom end bolts, and nuts
2 main bearing bolts, and nuts
1 Set of Coupling bolts & nuts
1 Set of air feet, and large pump valves
1 Set of piston studs, and nuts
3 Condenser tubes
3 boiler tubes, and 2 escape valve springs
2 donkey pump section valves, & delivery

The foregoing is a correct description,

Manufacturer.

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

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods
Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller
Stern tube Steam pipes tested Engine and boiler seatings Engines holding down bolts
Completion of pumping arrangements Boilers fixed Engines tried under steam
Completion of fitting sea connections Stern tube Screw shaft and propeller

Main boiler safety valves adjusted 181 lbs Thickness of adjusting washers P 1/4 S 3/8
Material of Crank shaft Iron Identification Mark on Do. ✓ Material of Thrust shaft Iron Identification Mark on Do. ✓

Material of Tunnel shafts Identification Marks on Do. ✓ Material of Screw shafts Iron Identification Marks on Do. ✓
Material of Steam Pipes S D 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 Yes

Is this machinery duplicate of a previous case Yes If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been built under British Corporation Survey to plans, and specifications mutually approved by this Society, and B.C. The workmanship throughout appears to be good, and efficient, and in my opinion is eligible to have class assigned L.M.C. 6.20

The amount of Entry Fee ... £ 10 : 10 : When applied for,
Special ... £ : : 19
Donkey Fee ... £ : : When received,
Travelling Expenses (if any) £ : : 4.8 19.20

J. W. Johnstone
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. SEP. 3 1920

Assigned

L.M.C. 6.20

CERTIFICATE WRITTEN.

Report of

Date of writing Report

No. in Survey Book

74152 on the
Gross 27
Net 10

Registered Horse Power

No. of Main Boilers

No. of Donkey Boilers

Steam Pressure in Main Boilers

in Donkey Boilers

Last Report No.

Particulars of

Periodical Surveys, when
Cause of Repairs, if an
Account of Damage (the
Parties being detailed
Dates and initials of an

damage cases when
declined?

Is the Surveyor personally

Do.

Was this not done, state

and what parts of the B

so what special means,

Surveyor to assure him

Is the Surveyor examining

Is the screw shaft now b

Is the shaft now been ch

Is the shaft now fitted

Is the distance betw

Is the Surveyor not com

Is the

Is the