

REPORT ON MACHINERY

No. 36587
1 DEC 1925

Received at London Office

Date of writing Report 19 When handed in at Local Office 30/11 1925 Port of Hull

No. in Survey held at Hull Date, First Survey 19/8/25 Last Survey 24-11-1925
Reg. Book. on the steam trawler "JUPITER".

Master Built at Beverly By whom built Cook, Welton & Gemmell. Tons Gross 403.83. Net 177.5

Engines made at Hull By whom made Amos Smith & Co. (No 3649) when made 1925

Boilers made at Hull By whom made Earle, S.B. & Co. Ltd. when made 1925

Registered Horse Power Owners H.F. Belgaum. Port belonging to Hafnarfirdi.

Nom. Horse Power as per Section 28 110 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

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

Dia. of Cylinders 14-24-40 Length of Stroke 27 Revs. per minute Dia. of Screw shaft as per rule 8.26 Material of screw shaft Steel as fitted 8 3/4

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 No 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 No If two liners are fitted, is the shaft lapped or protected between the liners No Length of stern bush 3-4

Dia. of Tunnel shaft as per rule 7.36 Dia. of Crank shaft journals as per rule 7.72 Dia. of Crank pin 8 Size of Crank webs 15 7/8 x 5 Dia. of thrust shaft under collars 8 Dia. of screw 10-6 Pitch of Screw 10-10 No. of Blades 4 State whether moveable No Total surface 40 sq. ft.

No. of Feed pumps 2 Diameter of ditto 2 7/8 Stroke 18 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 2 7/8 Stroke 18 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 9 1/2 Sizes of Pumps two 6 1/4 x 4 3/4 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room two 2 1/2, one forward & one aft. In Holds, &c. One 2" from each of following: Fish room port; Fish room starboard; fore hold, & the 3 stowage wells.

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

Are all the bilge suction pipes fitted with roses No Are the roses in Engine room always accessible No Are the sluices on Engine room bulkheads always accessible No

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Lock

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 forward 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

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door No worked from No

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Phoenix Aht. Hoerder Verein. (plates) Frodingham I.S.C. (bars) 15B

Total Heating Surface of Boilers 1900 sq. ft. Is Forced Draft fitted No No. and Description of Boilers One S.E. main.

Working Pressure 200 Tested by hydraulic pressure to 350 Date of test 23-9-25 No. of Certificate 3571

Can each boiler be worked separately Yes Area of fire grate in each boiler 63 sq. ft. No. and Description of Safety Valves to each boiler 2 spring loaded Area of each valve 5.94 sq. ft. Pressure to which they are adjusted 200 Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 8" Mean dia. of boilers 14-9 Length 10-6 Material of shell plates S

Thickness 1 5/16 Range of tensile strength 29/33 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams D.R. long. seams T.R.D.S. Diameter of rivet holes in long. seams 1 1/32 Pitch of rivets 9 Lap of plates or width of butt straps 19 5/8

Per centages of strength of longitudinal joint rivets 86.6 Working pressure of shell by rules 202 Size of manhole in shell 16 x 12

Size of compensating ring 40 x 30 x 1 5/16 No. and Description of Furnaces in each boiler 3 plain Material S Outside diameter 43 21/32

Length of plain part top 80 5/16 Thickness of plates crown 53 bottom 64 Description of longitudinal joint welded No. of strengthening rings 1

Working pressure of furnace by the rules 200 Combustion chamber plates: Material S Thickness: Sides 11/16 Back 11/16 Top 11/16 Bottom 11/16

Pitch of stays to ditto: Sides 10 x 8 Back 9 x 9 Top 10 x 8 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 204

Material of stays S Area at smallest part 1 3/4 dia Area supported by each stay 81 sq. ft. Working pressure by rules 224 End plates in steam space: Material S Thickness 1 3/16 Pitch of stays 21 x 18 How are stays secured D.N.W. Working pressure by rules 207 Material of stays S

Area at smallest part 3 1/4 dia Area supported by each stay 378 sq. ft. Working pressure by rules 213 Material of Front plates at bottom S

Thickness 15/16 Material of Lower back plate S Thickness 7/8 Greatest pitch of stays 14 x 9 23/32 Working pressure of plate by rules 216

Diameter of tubes 3 1/2 Pitch of tubes 5 x 5 Material of tube plates S Thickness: Front 15/16 Back 13/16 Mean pitch of stays 10 x 10

Pitch across wide water spaces 14 x 10 Working pressures by rules 204 Girders to Chamber tops: Material S Depth and thickness of girder at centre 9 1/4 x 1 3/4 Length as per rule 2-10 Distance apart 10 Number and pitch of stays in each 3 @ 8

Working pressure by rules 201 Steam dome: description of joint to shell % of strength of joint

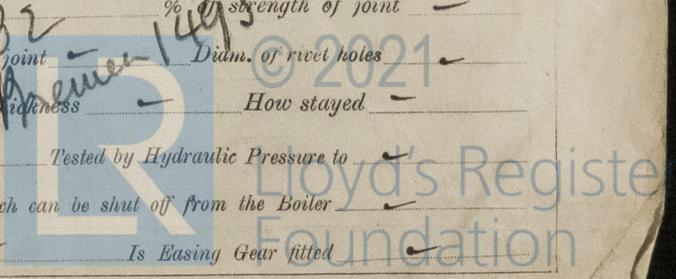
Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules How stayed

SUPERHEATER. Type Date of Approval 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



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two top end belts & nuts, 2 bottom end belts & nuts, 2 main bearing belts; 1 set of coupling belts, 1 set air feed & bilge pump valves; 1 propeller, 2 safety valve springs, set escape valve springs, set of spare valves for donkey pumps; circulating pump impeller & spindle, 6 condenser tubes, 6 plain boiler tubes; 12 piston studs & nuts.

Engines

The foregoing is a correct description FOR AMOS & SMITH LTD.

G. H. Robinson DIRECTOR, Manufacturer.

Boiler

FOR EARLE'S SHIPBUILDING & ENGINEERING CO. L'IMITÉ.

A. N. Tyacke ASSISTANT MANAGER

Dates of Survey while building: During progress of work in shops -- 1925: Aug 19, Sept 2, 3, 7, 8, 10, 11, 16, 18, 21, 28, 30, Oct 3, 8, 19, Nov 5, 9, 11; During erection on board vessel --- 13, 17, 18, 19, 24; Total No. of visits 24. Is the approved plan of main boiler forwarded herewith yes

Steel steam pipes fitted 1925 " " donkey " " "

Dates of Examination of principal parts: Cylinders 7-9-25 Slides 7-9-25 Covers 7-9-25 Pistons 7-9-25 Rods 3-9-25 Connecting rods 3-9-25 Crank shaft 3-9-25 Thrust shaft 23-9-25 Tunnel shafts 23-9-25 Screw shaft 11-9-25 Propeller 11-9-25 Stern tube 11-9-25 Steam pipes tested 11-11-25 Engine and boiler seatings 18-9-25 Engines holding down bolts 13-11-25 Completion of pumping arrangements 19-11-25 Boilers fixed 13-11-25 Engines tried under steam 19-11-25 Completion of fitting sea connections 18-9-25 Stern tube 18-9-25 Screw shaft and propeller 18-9-25 Main boiler safety valves adjusted 19-11-25 Thickness of adjusting washers P4 S 7/16 Material of Crank shaft Steel Identification Mark on Do. 181 P.F. Material of Thrust shaft Steel Identification Mark on Do. 181 P.F. Material of Tunnel shafts Steel Identification Marks on Do. 181 P.F. Material of Screw shafts Steel Identification Marks on Do. 183 G.E.V. Material of Steam Pipes S.D. Copper 4 1/4 dia x 6 W.G. Test pressure 400 lb per sq. in.

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 no If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. The engines & boiler of this vessel have been built under special survey & in accordance with the approved plans & the Rules of this Society. The materials & workmanship are good. The machinery has been satisfactorily fitted on board, tried under working conditions, & found satisfactory. The steam & feed pipes have been tested by hydraulic pressure as required by the Rules. The safety valves have been adjusted under steam & tried for accumulation. The machinery is eligible in my opinion to have the record of LMC 11.25: C.L. in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 11.25. C.L.

[Signature]

P. Fitzgerald Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 3 :- When applied for, 18/11/25 Special ... £ 27 : 10 When received, 20/11/25 Donkey Boiler Fee ... £ Travelling Expenses (if any) £

FRI. 4 DEC 1925

Committee's Minute

Assigned + LMC 11.25

C.L. CERTIFICATE WRITTEN

