

REPORT ON MACHINERY.

No. 11016

SAI SEP. 23 1921

Date of writing Report 4th July 1921 When handed in at Local Office

Received at London Office

Port of SouthamptonNo. in Survey held at SouthamptonDate, First Survey 23.4.20 Last Survey 5.6.1921Reg. Book. "S. LEVENAMON"(Number of Visits 39)Master Built at Southampton By whom built J. J. Thornycroft & Co. No 993 Tons Gross 514.96 Net 221.54Engines made at Southampton By whom made J. J. Thornycroft & Co. No 993 When built 1921Boilers made at Sunderland By whom made MacColl & Pollock & Co. No 112 when made 1921Registered Horse Power Owners G. J. Irwin & Co. Port belonging to SouthamptonNom. Horse Power as per Section 28 110 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted noENGINES, &c.—Description of Engines Triple ExpansionNo. of Cylinders 3 No. of Cranks 3Dia. of Cylinders 13.5" x 22" x 35" Length of Stroke 27" Revs. per minute 124 Dia. of Screw shaft as per rule 7.9" Material of S.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 ✓ 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 ✓ If twoliners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 2'8"Dia. of Tunnel shaft as per rule 7.27" Dia. of Crank shaft journals as per rule 7.5" Dia. of Crank pin 7.5" Size of Crank webs 14.5" x 28" of thrust shaft underrollers 7.5" Dia. of screw 10'0" Pitch of Screw 9'2" No. of Blades 4 State whether moreable no Total surface 31.5"No. of Feed pumps 2 Diameter of ditto 3.25" Stroke 11" Can one be overhauled while the other is at work yesNo. of Bilge pumps 2 Diameter of ditto 3.25" Stroke 11" Can one be overhauled while the other is at work yesNo. of Donkey Engines 2 Sizes of Pumps 5" x 3" x 5" No. and size of Suctions connected to both Bilge and Donkey pumpsin Engine Room Three 2" - 27 and 1 aft In Holds, &c. Two 2" AftNo. of Bilge Injections 1 sizes 4" Connected to condenser, or to circulating pump pump 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 ✓Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks BothAre 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 aboveAre 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 yesFuel pipes are carried through the bunkers none How are they protected ✓Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yesAre the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yesIs the Screw Shaft Tunnel watertight yes Is it fitted with a gland door yes worked from ✓BOILERS, &c.—(Letter for record S) Manufacturers of Steel Spencer & SonsTotal Heating Surface of Boilers 1832 Is Forced Draft fitted yes No. and Description of Boilers One Single-endedWorking Pressure 180 Tested by hydraulic pressure to 400 Date of test 18.18 No. of Certificate 3488 G. WildressCan each boiler be worked separately ✓ Area of fire grate in each boiler 51.5 No. and Description of Safety Valves to see Glynarthen 1st EntryEach boiler 2 Spring Area of each valve 5.94 Pressure to which they are adjusted 185 lbs Are they fitted with easing gear yesSmallest distance between boilers or uptakes and bunkers or woodwork 9" Mean dia. of boilers 13'0" Length 11'6" Material of shell plates S.Thickness 1 1/4" Range of tensile strength 28-32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams WRLong. seams T.R. 10 BS Diameter of rivet holes in long seams 1 1/4" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 18 5/8"Percentages of strength of longitudinal joint 91.6 Working pressure of shell by rules 200 Size of manhole in shell 12" x 16"Size of compensating ring 7" x 1 1/4" No. and Description of Furnaces in each boiler 3 Starved Material S. Outside diameter 41 1/8"Length of plain part top 9 1/2" Thickness of plates bottom 9 1/2" Description of longitudinal joint welded No. of strengthening rings ✓Working pressure of furnace by the rules 211 Combustion chamber plates: Material S. Thickness: Sides 1 1/8" Back 1 1/8" Top 1 1/8" Bottom 1 1/8"Pitch of stays to ditto: Sides 8 3/4" x 9" Back 8 3/4" x 8 1/2" Top 9" x 8 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 207Material of stays S. Area at smallest part 2.43 Area supported by each stay 78 3/4" Working pressure by rules 232 End plates in steam spaceMaterial S. Thickness 1 3/32" Pitch of stays 17" x 16" How are stays secured nuts x 1 1/2" Working pressure by rules 206 Material of stays S.Area at smallest part 6.33 Area supported by each stay 272 Working pressure by rules 202 Material of Front plates at bottom S.Thickness 1" Material of Lower back plate S. Thickness 1" Greatest pitch of stays 14 1/2" x 8 3/4" Working pressure of plate by rules 241Diameter of tubes 2 1/2" Pitch of tubes 3 3/4" x 3 1/8" Material of tube plates S. Thickness: Front 1" Back 1 1/8" Mean pitch of stays 8 3/4"Pitch across wide water spaces 13 1/4" Working pressures by rules 204 Girders to Chamber tops: Material S. Depth andThickness of girder at centre 8" x 1 3/4" Length as per rule 31 1/4" Distance apart 8 1/2" Number and pitch of stays in each 20 9"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 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

002289-002297-0049

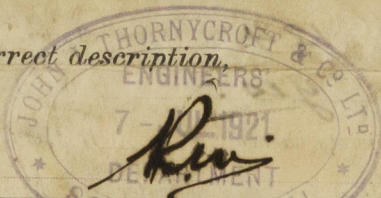
IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two each top & bottom end connecting rod bolts and nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set each feed & bilge pump valves. Iron of various sizes, a quantity of assorted bolts, nuts, etc.

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

7-17	3.11.21	24.28	12.18.30	9.16	1.9.16.24.30	9.14.22.
6-20.	7.20.	8.20.	9.20.	11.20.	13.20.	
3.11.24.28.	9-19-23.	1.3.23.	7	5		
1.21.	2.21.	3.21.	4.21.	7.21.		

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 30-8-20. Slides 28.7.20. Covers 24.7.21. Pistons 9.9.20. Rods 18.8.20. Connecting rods 9.9.20. Crank shaft 17.6.20. Thrust shaft 16.9.20. Tunnel shafts Screw shaft 3.1.21. Propeller 3.1.21. Stern tube 24.11.20. Steam pipes tested 11.1.21. Engine and boiler seatings 19.2.21. Engines holding down bolts 23.3.21. Completion of pumping arrangements 23.3.21. Boilers fixed 4.3.21. Engines tried under steam 7.4.21. Completion of fitting sea connections 23.3.21. Stern tube 23.2.21. Screw shaft and propeller 1.3.21. Main boiler safety valves adjusted 23.3.21. Thickness of adjusting washers SV $\frac{1}{32}$ " PV $\frac{3}{8}$ ".
Material of Crank shaft S Identification Mark on Do. 21.4.20 J.P. Material of Thrust shaft S Identification Mark on Do. 21.4.20 J.P.
Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts S Identification Marks on Do. 31.3.20 J.P.
Material of Steam Pipes Copper Test pressure 36 lbs.

Is an installation fitted for burning oil fuel

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 St. Lenaw. No 992.

General Remarks

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

The engines & boiler of this vessel have been constructed under special Survey in accordance with the Rules. The materials and workmanship are sound and good. The Boiler tested by hydrostatic pressure and with the engines secured on board and 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 +Imc 7.21. in the Register book.

Certificate (if required) to be sent to

The amount of Entry Fee ... £ 3 : 0 :

Special ... £ 27 : 10 :

Donkey Boiler Fee ... £ :

Travelling Expenses (if any) £ :

When applied for,

31 Sept 1921

When received,

9.9.21

Committee's Minute

TUE. 13 SEP. 1921

Assigned

+ Ldn. 6.6.21

F. D. C. L.

+ RB 18 refused 2

For H. Gilby Self.

J. G. MacKillop

Engineer Surveyor to Lloyd's Register of Shipping.



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