

# REPORT ON MACHINERY.

No. 31399

Received at London Office 24/10/19 Port of Hull. SAT. OCT. 25. 1919

Date of writing Report 19 When handed in at Local Office 24/10/19

No. in Survey held at Hull. Date, First Survey Dec 5/18 Last Survey Oct. 15 1919

Reg. Book. on the SS. "TENEDOS" late "Dominick Addison" (No. 412) (Number of Visits 42) Tons Gross 290 Net 127

Master Built at Beverley By whom built Cook Welton & Gemmell Ltd When built 1919

Engines made at Hull By whom made Amos & Smith Ltd (No. 3069) when made 1919

Boilers made at Hull By whom made Amos & Smith Ltd (No. 3068) when made 1919

Registered Horse Power Owners Zucker, Dippet & Co. Ltd Port belonging to Cardiff

Nom. Horse Power as per Section 28 87 86 Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted No.

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

Dia. of Cylinders 12 1/2"-21 1/4" 35" Length of Stroke 26" Revs. per minute 110. Dia. of Screw shaft 7.57" 7.5" Material of screw shaft 7 5/8"

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 If the liner is in more than one length are the joints burned No. Does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic substance insoluble in water and non-corrosive If two

are fitted, is the shaft lapped or protected between the liners? No. Length of stern bush

Dia. of Tunnel shaft as per rule 6.58" Dia. of Crank shaft journals as per rule 6.91" 6.95" Dia. of Crank pin 7 1/8" Size of Crank webs 14x4 9/16" Dia. of thrust shaft under

collars 7 1/8" Dia. of screw 9'-6" Pitch of Screw 11'-1 1/2" No. of Blades 4 State whether moveable no Total surface 35.5 sq ft

No. of Feed pumps one Diameter of ditto 2 3/4" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Bilge pumps one Diameter of ditto 2 3/4" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Donkey Engines one & bilge ejector Sizes of Pumps 6"x4"x6" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room One 2" direct for, one 2" aft, one 2" for, 2 ejectors In Holds, &c. One 2" from forehold, one 2" from

slushwell, 2" ejector from slushwell

No. of Bilge Injections one sizes 3 1/2" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size 2" ejector

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

What pipes are carried through the bunkers Forward 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 Yes

OILERS, &c.—(Letter for record S) Manufacturers of Steel Port Talbot Steel Co. Ltd—Port Talbot

Total Heating Surface of Boilers 1590 sq ft 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 31/7/19 No. of Certificate 3379

Can each boiler be worked separately Yes Area of fire grate in each boiler 48.75 sq ft No. and Description of Safety Valves to

each boiler two spring loaded Area of each valve 4.90 sq ft Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 11" INT. dia. of boilers 162" Length 10'-6 15/16" Material of shell plates steel

Thickness 1 3/32" Range of tensile strength 28/32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams double

long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 5/32" Pitch of rivets 8" Lap of plates on width of butt straps 17"

Per centages of strength of longitudinal joint rivets 89.3 plate 85.5 Working pressure of shell by rules 180 lbs Size of manhole in shell 16"x12"

Size of compensating ring 9"x1 3/32" No. and Description of Furnaces in each boiler 3 plain Material steel Outside diameter 40 9/16"

Length of plain part top 8 1/2" bottom 7 6" Thickness of plates crown 25/32" Description of longitudinal joint welded No. of strengthening rings 1

Working pressure of furnace by the rules 188 Combustion chamber plates: Material steel Thickness: Sides 1/16" Back 21/32" Top 1/16" Bottom 7/8"

Pitch of stays to ditto: Sides 9 1/2"x9 3/8" Back 9"x9" Top 9 1/2"x9 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 182

Material of stays steel Area at smallest part 2.070" Area supported by each stay 90.250" Working pressure by rules 206 End plates in steam space:

Material steel Thickness 1 1/16" Pitch of stays 17 3/8"x17" How are stays secured DN4W Working pressure by rules 181 Material of stays steel

Area at smallest part 6.10" Area supported by each stay 2950" Working pressure by rules 215 Material of Front plates at bottom steel

Thickness 31/32" Material of Lower back plate steel Thickness 15/16" Greatest pitch of stays 14"x9" Working pressure of plate by rules 219

Diameter of tubes 3 1/2" Pitch of tubes 5"x4 3/4" Material of tube plates steel Thickness: Front 31/32" Back 7/8" Mean pitch of stays 10"

Pitch across wide water spaces 14" Working pressures by rules 184 lbs Girders to Chamber tops: Material steel Depth and

thickness of girder at centre 8 1/2"x1 3/4" Length as per rule 32" Distance apart 9 1/2" Number and pitch of stays in each two 9 1/2"

Working pressure by rules 197 Steam dome: description of joint to shell Yes % of strength of joint Yes

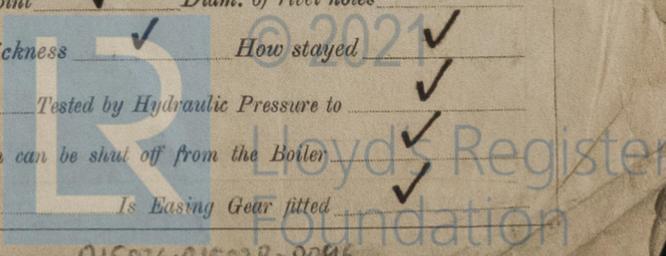
Diameter Yes Thickness of shell plates Yes Material Yes Description of longitudinal joint Yes Diam. of rivet holes Yes

Pitch of rivets Yes Working pressure of shell by rules Yes Crown plates Yes Thickness Yes How stayed Yes

UPERHEATER. 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



015026-015037-0046

IS A DONKEY BOILER FITTED? no

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—Two top & two bottom end bolts & nuts, one set of coupling bolts, 2 main bearing bolts & nuts, one set each of Air Feed & Bilge Pump Valves, 6 junk ring studs & nuts, 3 condenser tubes, 3 escape valve springs, 3 boiler tubes, 2 spare valves for donkey pump, a quantity of assorted bolts & nuts, and iron of various sizes.

The foregoing is a correct description,

For AMOS & SMITH LTD.

*W. Robinson*

SECRETARY.

Manufacturer.

Dates of Survey while building { During progress of work in shops --- 1918. Dec. 5. 14. 20. 1919. Jan 9. 14. 20. March. 13. 24. 31. Apr. 3. 10. 16. May 3. 10. 12. 27. During erection on board vessel --- Jun 6. 14. July 2. 3. 16. 23. 30 Aug 2. 14. 16. 18. 23. 25. 28. 29. Sept 1. 6. 10. 15. 17. 18. 19. 26. 30. Total No. of visits 6 & 6. 15. 4 2. Is the approved plan of main boiler forwarded herewith no

Dates of Examination of principal parts—Cylinders 17/6/19 Slides 3/5/19 Covers 8/4/19 Pistons 14/1/19 Rods 17/6/19. Connecting rods 17/6/19 Crank shaft 3/7/19 Thrust shaft 3/7/19 Tunnel shafts ✓ Screw shaft ✓ Propeller 3/1/19 Stern tube 24/12/18 Steam pipes tested 15/9/19. Engine and boiler seatings 1/9/19. Engines holding down bolts 6/9/19 Completion of pumping arrangements 15/10/19 Boilers fixed 6/9/19 Engines tried under steam 15/10/19. Completion of fitting sea connections 3/3/19 Stern tube Pitted under B.C. Screw shaft and propeller Pitted under B.C. Main boiler safety valves adjusted 18/9/19 Thickness of adjusting washers P 5/16" S 7/16"

Material of Crank shaft steel Identification Mark on Do. JH 2356 Material of Thrust shaft iron Identification Mark on Do. JH 2357 Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts steel Identification Marks on Do. W.D.C. 21/11/18 Material of Steam Pipes Steel (solid drawn) Test pressure 540 lbs/sq" 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 no. If so, state name of vessel ✓

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

The machinery of this vessel has been constructed under Special Survey in accordance with the approved plans & the Rules of the Society. The materials & workmanship are good. The boiler and steam pipe have been tested as above & found sound & good. The machinery has been properly fitted & secured on board the vessel & on completion was tested at full power for two hours as required by the Admiralty & found satisfactory. The safety valves have been adjusted under steam & accumulation did not exceed 9 lbs.

In my opinion the vessel is eligible for the record + LMC 10, 19

It is submitted that this vessel is eligible for THE RECORD + LMC 10.19.

*W.D.* 27/10/19

The amount of Entry Fee ... £ 2 : 0 : When applied for. Special ... £ 26 : 2 : 24/10/19 Donkey Boiler Fee ... £ : : When received. Travelling Expenses (if any) £ : : 27.10.19

*W.N. Stone*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 26 OCT. 1919  
Assigned + LMC 10.19



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