

# REPORT ON MACHINERY.

No. 15494.

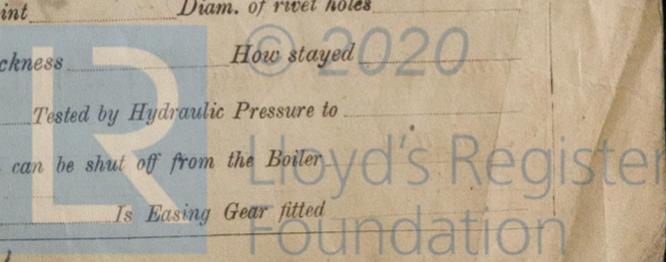
Received at London *W.M.* JUL 19 1920

Writing Report *17-7-20* When handed in at Local Office *17-7-20* Port of *Leith*  
 Survey held at *Burntisland* Date, First Survey *2-4-20* Last Survey *14-7-1920*  
 on the *new steel S.S. "Antinea"* (Number of Visits *2*)  
 Built at *Burntisland* By whom built *Burntisland & Co. (Edinb)* Tons { Gross *2520* Net *1510*  
 when made *1920*  
 By whom made *John Barton Eng. Co. (Edinb)* when made *1920*  
 Owners *Loi Auxiliaire Navigation* Port belonging to *Hankes*  
 Horse Power as per Section 28 *237* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes*

**ENGINES, &c.—Description of Engines** *Triple expansion (one Act)* No. of Cylinders *3* No. of Cranks *3*  
 of Cylinders *21.34.57* Length of Stroke *36* Revs. per minute \_\_\_\_\_ Dia. of Screw shaft \_\_\_\_\_ Material of screw shaft \_\_\_\_\_  
 Is the after end of the liner made water tight \_\_\_\_\_  
 If the liner is in more than one length are the joints burned \_\_\_\_\_  
 If the liner does not fit tightly at the part \_\_\_\_\_  
 In the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive \_\_\_\_\_  
 If two \_\_\_\_\_  
 are fitted, is the shaft lapped or protected between the liners \_\_\_\_\_ Length of stern bush \_\_\_\_\_  
 Dia. of Crank shaft journals \_\_\_\_\_ Dia. of Crank pin \_\_\_\_\_ Size of Crank webs \_\_\_\_\_ Dia. of thrust shaft under \_\_\_\_\_  
 Pitch of Screw \_\_\_\_\_ No. of Blades \_\_\_\_\_ State whether moveable \_\_\_\_\_ Total surface \_\_\_\_\_  
 Diameter of ditto \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
 Diameter of ditto \_\_\_\_\_ Stroke \_\_\_\_\_ Can one be overhauled while the other is at work \_\_\_\_\_  
 Sizes of Pumps \_\_\_\_\_ No. and size of Suctions connected to both Bilge and Donkey pumps \_\_\_\_\_  
 In Holds, &c. \_\_\_\_\_  
 Connected to condenser, or to circulating pump \_\_\_\_\_ Is a separate Donkey Suction fitted in Engine room & size \_\_\_\_\_  
 Are the roses in Engine room always accessible \_\_\_\_\_ Are the sluices on Engine room bulkheads always accessible \_\_\_\_\_  
 Are they Valves or Cocks \_\_\_\_\_  
 Are the Discharge Pipes above or below the deep water line \_\_\_\_\_  
 Are the Blow Off Cocks fitted with a spigot and brass covering plate *Yes*  
 How are they protected \_\_\_\_\_  
 all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times \_\_\_\_\_  
 the Bilge Suction Pipes, Cocks, and Valves arranged so as, to prevent any communication between the sea and the bilges \_\_\_\_\_  
 Is it fitted with a watertight door *Yes* worked from *U.E. Platform*

**BOILERS, &c.—(Letter for record \_\_\_\_\_) Manufacturers of Steel \_\_\_\_\_**  
 Is Forced Draft fitted \_\_\_\_\_ No. and Description of Boilers \_\_\_\_\_  
 Tested by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ No. of Certificate \_\_\_\_\_  
 Area of fire grate in each boiler \_\_\_\_\_ No. and Description of Safety Valves to \_\_\_\_\_  
 Area of each valve \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ Are they fitted with easing gear \_\_\_\_\_  
 Mean dia. of boilers \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_  
 Are the shell plates welded or flanged \_\_\_\_\_ Descrip. of riveting: cir. seams \_\_\_\_\_  
 Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Lap of plates or width of butt straps \_\_\_\_\_  
 Working pressure of shell by rules \_\_\_\_\_ Size of manhole in shell \_\_\_\_\_  
 No. and Description of Furnaces in each boiler \_\_\_\_\_ Material \_\_\_\_\_ Outside diameter \_\_\_\_\_  
 Description of longitudinal joint \_\_\_\_\_ No. of strengthening rings \_\_\_\_\_  
 Thickness of plates \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_  
 Combustion chamber plates: Material \_\_\_\_\_ Thickness: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Bottom \_\_\_\_\_  
 If stays are fitted with nuts or riveted heads \_\_\_\_\_ Working pressure by rules \_\_\_\_\_  
 Area supported by each stay \_\_\_\_\_ Working pressure by rules \_\_\_\_\_ End plates in steam space: \_\_\_\_\_  
 Working pressure by rules \_\_\_\_\_ Material of Front plates at bottom \_\_\_\_\_  
 Working pressure of plate by rules \_\_\_\_\_  
 Material of tube plates \_\_\_\_\_ Thickness: Front \_\_\_\_\_ Back \_\_\_\_\_ Mean pitch of stays \_\_\_\_\_  
 Girders to Chamber tops: Material \_\_\_\_\_ Depth and \_\_\_\_\_  
 Distance apart \_\_\_\_\_ Number and pitch of stays in each \_\_\_\_\_  
 % of strength of joint \_\_\_\_\_  
 Description of longitudinal joint \_\_\_\_\_ Diam. of rivet holes \_\_\_\_\_  
 How stayed \_\_\_\_\_  
 Working pressure of shell by rules \_\_\_\_\_ Crown plates \_\_\_\_\_ Thickness \_\_\_\_\_  
**SUPERHEATER.** 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 \_\_\_\_\_

WWS8-0184



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:-

Handwritten notes: See Sunderland Rpt No 27877, 12.4.20, 14.7.20, 14.8.20

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

2-4-6, 14.7.20, 2

Is the approved plan of main boiler forwarded herewith

donkey

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, Thickness of adjusting washers

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, Test pressure

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, If so, state name of vessel

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

The machinery of this vessel is eligible in my opinion to have the report of L.M.C 7-20 as recommended in Sunderland Rpt No 27877 1st Entry Report enclosed

The amount of Entry Fee ... £, Special ... £, Donkey Boiler Fee ... £, Travelling Expenses (if any) £

J.R. Williamson, Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute, Assigned, See attached R.C. report

