

REPORT ON MACHINERY

No. 797

MON. 15. 1919

Received at London Office

Date of writing Report 30.8.1919 When handed in at Local Office 1-9-1919 Port of CADIZ

No. in Survey held at CADIZ

Date, First Survey Feb. 22nd 1919 Last Survey Aug 5th 1919

Reg. Book.

(Number of Visits Five) Gross 538

on the S.S. AMIR

Net 372

Master/JESUS DE GALDONA Built at CADIZ By whom built ECHEYARRIETA Y LARRINAGA When built 1919

Engines made at ABERDEEN By whom made J. ABERNETHY & CO. LTD. when made

Boilers made at ABERDEEN By whom made J. ABERNETHY & CO. LTD. when made

Registered Horse Power 460 Owners ECHEYARRIETA Y LARRINAGA Port belonging to CADIZ

Nom. Horse Power as per Section 28 86 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

ENGINES, &c.—Description of Engines SEE ABN. Report N^o 12155. No. of Cylinders 3 No. of Cranks 3Dia. of Cylinders 12 $\frac{1}{2}$, 21, 35 Length of Stroke 27 Revs. per minute 112 Dia. of Screw shaft as per rule 2.44 as fitted 2.44 Material of screw shaft

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 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 If two

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 2-8

Dia. of Tunnel shaft as per rule 6.66 as fitted 6.66 Dia. of Crank shaft journals as per rule 6.99 as fitted 6.99 Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under

collars 7 $\frac{1}{8}$ Dia. of screw 108 Pitch of Screw 10-6 No. of Blades 4 State whether moveable No Total surface 32 sq

No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Donkey Engines Two Sizes of Pumps 3 $\frac{1}{2}$, 5 $\frac{1}{4}$, 5 FEED, 6 \times 4 \times 6 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2-3 In Holds, &c. 2-3

No. of Bilge Injections 1 size 3 $\frac{1}{2}$ Connected to condenser or to circulating pump Is a separate Donkey Suction fitted in Engine room & size 3

Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the stances 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 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 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 Yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

Dates of examination of completion of fitting of Sea Connections 25-2-1919 of Stern Tube 25-2-1919 Screw shaft and Propeller 24-5-1919

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record (S.) Manufacturers of Steel

Total Heating Surface of Boilers 1550 Is Forced Draft fitted No No. and Description of Boilers I S B

Working Pressure 180 lb Tested by hydraulic pressure to Date of test No. of Certificate

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

each boiler Area of each valve Pressure to which they are adjusted 185 lb Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 72 Mean dia. of boilers Length Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Description of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

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

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

M1060-0083

IS A DONKEY BOILER FITTED? ☒

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied :-

Spare gear as per Abn. Report N^o 12155 placed on board

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - May 24th, June 25th, Aug. 4th, 5th, 1919.
During erection on board vessel - - -
Total No. of visits 34 Abn + 5 Cadiz = 39.

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 24-5-19 Propeller 24-5-19
Stern tube 24-5-19 Steam pipes tested 23-6-19 Engine and boiler seatings 23-6-19 Engines holding down bolts 4-8-19
Completion of pumping arrangements 5-8-19 Boilers fixed 4-8-19 Engines tried under steam 5-8-19
Main boiler safety valves adjusted 5-8-19 Thickness of adjusting washers 1/2"

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 ☒ Copper ☒ Test pressure 360 lb. ☒

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, opinion as to class, &c.)

The machinery and Boiler of constructed under Special Survey in accordance with Abn. Report N^o 12155, now having been efficiently fitted on board this vessel and tried under steam with satisfactory results it is eligible, in our opinion, to have the notation of **⊕ LMC 8-19**.

It is submitted that
this vessel is eligible for
THE RECORD. ⊕ LMC 8-19.

JWD. 16/9/19

The amount of Entry Fee ... £ 255.00
Special ... £ 255.00
Donkey Boiler Fee ... £ 4.00
Travelling Expenses (if any) ... £ 4.00
Cp. To BCL.

Committee's Minute ...
Assigned ...

Arthur Palmer Sympson
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

Lloyd's Register Foundation