

REPORT ON MACHINERY.

Received at London Office

APR 5 1917

Date of writing Report 28.3.1917 When handed in at Local Office 30.3.1917 Port of Leith

No. in Survey held at Alcoa Date, First Survey 29.2.16 Last Survey 26.3.1917

Reg. Book. on the Ys Straidi (Number of Visits 21.) Tons { Gross 326.46 Net 113.50

Master Built at Alcoa By whom built Jeffrey & Co When built 1917

Engines made at Alcoa By whom made Jeffrey & Co when made 1917

Boilers made at Wagon By whom made A. W. Duffield when made 1917

Registered Horse Power Owners Messrs Howden Bros Port belonging to Belfast

Nom. Horse Power as per Section 28 71 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Compound No. of Cylinders 2 No. of Cranks 2

Dia. of Cylinders 16 1/2" 36" Length of Stroke 24" Revs. per minute 100 Dia. of Screw shaft 4.66" Material of screw shaft Iron

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 Yes If two

liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 36"

Dia. of Tunnel shaft 6.96" Dia. of Crank shaft journals 7.31" Dia. of Crank pin 7 1/2" Size of Crank webs 3 1/2" Dia. of thrust shaft under

collars 7 1/2" Dia. of screw 9.0" Pitch of Screw 11-6" No. of Blades 4 State whether moveable Yes Total surface 305"

No. of Feed pumps 2 Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Sizes of Pumps 6x6x6 5x3 1/2 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 4, 2 1/4" In Holds, &c. 2 In main hold 2 1/2"

No. of Bilge Injections 1 sizes 4" Connected to condenser or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3"

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 Bilge Suction Pipes How are they protected Strong 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

Dates of examination of completion of fitting of Sea Connections 26/3/17 of Stern Tube 26/3/17 Screw shaft and Propeller 26/3/17

Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door No worked from 2nd Deck

BOILERS, &c.—(Letter for record) Manufacturers of Steel In Glasgow Report 36610

Total Heating Surface of Boilers 1300 Is Forced Draft fitted No No. and Description of Boilers

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

Can each boiler be worked separately Area of fire grate in each boiler 44 1/2 sq ft No. and Description of Safety Valves to

each boiler 2 Spring Valves Area of each valve 4 9/16" Pressure to which they are adjusted 140 lbs Are they fitted with easing gear Yes

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

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. 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 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 Thickness of plates 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



