

REPORT ON MACHINERY.

No. 11999.

Received at London Office

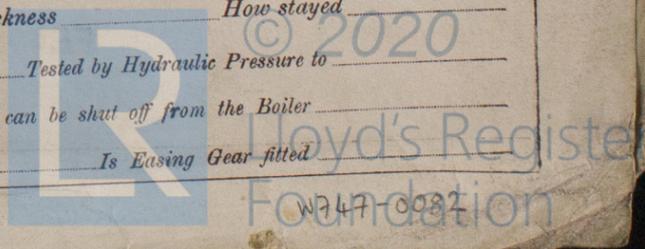
THU. 11. OCT. 1914

Date of writing Report 10.10.14 When handed in at Local Office 10.10.14 Port of Aberdeen
 No. in Survey held at Aberdeen Date, First Survey 23.1.14 Last Survey 10.9.1914
 Reg. Book. S.S. Wyndhurst (Number of Visits 25) Tons { Gross 570.1
 on the S.S. Wyndhurst Net 252.8
 Master Thomas Pann Built at Aberdeen By whom built John Lewis & Sons Ltd. No. 922 When built 1914
 Engines made at Aberdeen By whom made Jas. Abernethy & Co. Ltd. No. 906 when made 1914
 Boilers made at Glasgow By whom made David Rowan & Co. No. 251 when made 1914
 Registered Horse Power 96 Owners Bleives Western Valleys Anthracite Collieries Ltd. Port belonging to Swansea
 Nom. Horse Power as per Section 28 96 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 13 1/4", 23", 34" Length of Stroke 27" Revs. per minute 105 Dia. of Screw shaft as per rule 4.94" Material of screw shaft as fitted 8 1/2" Scraper
 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 length 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 no space If two
 liners are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 2' 11"
 Dia. of Tunnel shaft as per rule 6.486 6.95" Dia. of Crank shaft journals as per rule 6.810 7.29" Dia. of Crank pin 4 1/2" Size of Crank webs 10 1/2" x 4 1/2" Dia. of thrust shaft under
 collars 4 1/2" Dia. of screw 10' 0" Pitch of Screw 11' 6" No. of Blades 4 State whether moveable no Total surface 34' 4"
 No. of Feed pumps 2 Diameter of ditto 2 3/4" Stroke 13 1/2" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 2 3/4" Stroke 13 1/2" Can one be overhauled while the other is at work yes
 No. of Donkey Engines two Sizes of Pumps Ballast 6' x 8 1/2' x 6' duplex No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two of 2 1/2" Boiler room one of 2" In Holds, &c. One each wing 2" dia. Out peak one of 2"
 No. of Bilge Injections 1 sizes 3 1/2" Connected to condenser, or to circulating pump C.P. Is a separate Donkey Suction fitted in Engine room & size yes
 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 none
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both valves and cocks
 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 Sues from Hold & Ballast Tanks How are they protected Strong wood casing
 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 None Is it fitted with a watertight door yes worked from yes

BOILERS, &c.—(Letter for record (a)) Manufacturers of Steel Glasgow
 Total Heating Surface of Boilers 1741.7 Is Forced Draft fitted no No. and Description of Boilers One, cyl. mult. single ended
 Working Pressure 180 lbs. Tested by hydraulic pressure to 360 lbs. Date of test 8.6.14 No. of Certificate 13813
 Can each boiler be worked separately yes Area of fire grate in each boiler 53 3/4 No. and Description of Safety Valves to
 each boiler 2: direct spring Area of each valve 5.94 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 no side bunkers Mean dia. of boilers 13' 9" Length 10' 6" Material of shell plates
 Thickness Range of tensile strength Are the shell plates welded or flanged yes 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 rivets Working pressure of shell by rules Size of manhole in shell
 plate Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter
 Length of plain part top Thickness of plates bottom 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 End plates in steam space:
 Material of stays Area at smallest part Area supported by each stay Working pressure by rules Material of stays
 Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays
 Area 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 % of strength of joint
 Working pressure by rules Steam dome: description of joint to shell Diam. of rivet holes
 Diameter Thickness of shell plates Material Description of longitudinal joint Thickness How stayed
 Pitch of rivets Working pressure of shell by rules Crown plates Thickness

SUPERHEATER. Type Water tube Date of Approval of Plan 10.10.14 Tested by Hydraulic Pressure to 360 lbs.
 Date of Test 8.6.14 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler
 diameter of Safety Valve 1 1/2" Pressure to which each is adjusted 185 lbs. Is Easing Gear fitted yes



IS A DONKEY BOILER FITTED? no. If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two top, and 2 bottom end bolts & nuts; 2 main bearing and one set, coupling bolts & nuts; one set each, Air, Circulating, Feed & Bilge pump valves; 1 each, main & donkey check valves; bolts & nuts assorted, and iron of various sizes.

The foregoing is a correct description,

JAMES ABERNETHY & COMPANY LIMITED. Manufacturers of Main Engines.

Dates of Survey while building: During progress of work in shops - - 1914. Jan. 23, 29 - Feb. 1, 24 - March 4 - 26 - April 3, 20 - May 9, 15, 28 - June 28 - During erection on board vessel - - - July 2, 6, 10, 11, 13, 30 - Aug 2, 20, 31 - Sept. 2, 6, 8, 10 - Total No. of visits 25/ Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 29 24 3 20 7 2 3 Slides 26 3 9 3 4 5 Covers 26 3 28 3 4 2 Pistons 26 3 20 9 3 4 2 Rods 1 2 2 2 2 2 Connecting rods 1 2 2 2 2 Crank shaft 3.4.14 Thrust shaft 3.4.14 Tunnel shafts none. Screw shaft 28.6.14 Propeller 28.6.14 Stern tube 28 28 Steam pipes tested 8.9.14 Engine and boiler seatings 5.4.14 Engines holding down bolts 11.12.30 Completion of pumping arrangements 30.4.14 Boilers fixed 6.9.14 Engines tried under steam 10.9.14 Completion of fitting sea connections 2.4.14 Stern tube 6.4.14 Screw shaft and propeller 6.4.14 Main boiler safety valves adjusted 10.9.14 Thickness of adjusting washers Port 13/32" Starboard 1/2" full. Material of Crank shaft I.S. Identification Mark on Do. 645.17 Material of Thrust shaft S. Identification Mark on Do. 4413 (LTH) Material of Tunnel shafts none Identification Marks on Do. ✓ Material of Screw shafts I. Identification Marks on Do. 4413 (LTH) Material of Steam Pipes Copper 3 3/4" bore No. 6 T.W. 9. ✓ Test pressure 360 lbs per square inch. Is an installation fitted for burning oil fuel no. 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.) These Engines together with the Boiler (Cls. 4 & 6. Rept. No 36959) have been built under special survey and in accordance with the Secretary's Letters and the provisions of the Rules. The materials and workmanship are good. They have now been properly fitted on board the vessel and tried under steam with satisfactory results, and are now in good order, and in my opinion entitled to the record + L.M.C. 9.17 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 9.17.

J.M. J.W.D. 11/10/17. Ridley Howell. Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 1 : : When applied for, Survey of Engines & fittings Special on 4.10.17. £ 9 : 12 : : 10.10.1917 Donkey Boiler Fee ... £ : : When received, Travelling Expenses (if any) £ : : 8.11.1917

Committee's Minute FRI OCT 19 1917.

Assigned + L.M.C. 9.17

Certificate (if required) to be sent to Aberdeen Office.

The Surveyors are requested not to write on or below the space for Committee's Minute.

Date of writing No. in Reg. Book. Master Engines made Boilers made Registered MULTIT (Letter for Boilers No. No. of Certi safety valves Are they fitted Smallest dis Material of Descrip. of Lap of pla rules boiler 3 Description plates: M Top 9 1/2 smallest p Pitch of s Area supp Lower bac Pitch of t water spa girder at Working Diameter Pitch of SUPER Date of T Diameter survey No. Dates of Survey while building GENI Su Tr Com Assi

