

# REPORT ON MACHINERY.

Received at London Office

WED. 20 FEB. 1913

Date of writing Report

19

When handed in at Local Office

19. 2. 10/18. Port of Aberdeen

No. in Survey held at Aberdeen  
Reg. Book.

Date, First Survey 19. 9. 14.

Last Survey

13. 2. 1918

(Number of Visits 2)

on the steel sc drifter "Indian Summer"

Tons } Gross 96.46  
Net 33.36

Master ✓

Built at Aberdeen

By whom built John Lewis & Sons Ltd. No. 55

When built 1918

Engines made at Aberdeen

By whom made

John Lewis & Sons Ltd. No. 126

when made 1918

Boilers made at Renfrew

By whom made

William Simons & Co. Ltd. D.R.I.

when made 1914

Registered Horse Power 43

Owners

The Admiralty

Port belonging to ✓

Nom. Horse Power as per Section 28 43

Is Refrigerating Machinery fitted for cargo purposes no

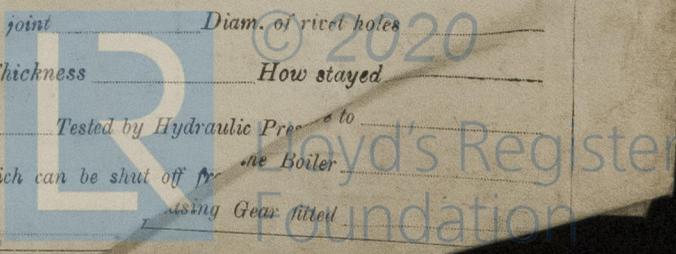
Is Electric Light fitted no

**ENGINES, &c.**—Description of Engines Triple expansion ✓ No. of Cylinders 3 ✓ No. of Cranks 3 ✓  
 Dia. of Cylinders 9 1/2", 15 1/2", 26" ✓ Length of Stroke 18" Revs. per minute 140 ✓ Dia. of Screw shaft as per rule 5 1/4" ✓ Material of screw shaft Scraper iron  
 as fitted 6" ✓  
 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 ✓ Length of stern bush 2' 1 1/2" ✓  
 Dia. of Tunnel shaft as per rule 4.796 ✓ Dia. of Crank shaft journals as per rule 5.035 ✓ Dia. of Crank pin 5 1/4" ✓ Size of Crank webs 8 1/4" x 3 1/2" ✓ Dia. of thrust shaft under  
 as fitted none ✓ as fitted 5 1/4" ✓  
 collars 5 1/4" ✓ Dia. of screw 6' 9" ✓ Pitch of Screw 8' 6" ✓ No. of Blades 4 State whether moveable no ✓ Total surface 18 1/2" ✓  
 No. of Feed pumps 1 ✓ Diameter of ditto 2 1/2" ✓ Stroke 9" ✓ Can one be overhauled while the other is at work ✓  
 No. of Bilge pumps 1 ✓ Diameter of ditto 2" ✓ Stroke 9" ✓ Can one be overhauled while the other is at work ✓  
 No. of Donkey Engines one ✓ Sizes of Pumps 5 1/4" x 3 1/2" x 5" duplex ✓ No. and size of Suctions connected to both Bilge and Donkey pumps  
 In Engine Room one of 2" ✓ In Holds, &c. Fishhold, one of 2" ✓  
Also ejector drawing from all parts, and with separate suction to engine room ✓  
 No. of Bilge Injections 1 sizes 2 1/2" Connected to condenser, or to circulating pump C.T. ✓ Is a separate Donkey Suction fitted in Engine room & size yes: 2" ✓  
 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 Sucs from Fishhold & Boiler feed 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 ✓ worked from ✓

**BOILERS, &c.**—(Letter for record (S) ✓) Manufacturers of Steel ✓  
 Total Heating Surface of Boilers 814 1/2 ✓ 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 ✓ Date of test 5. 12. 14. ✓ No. of Certificate 14011 ✓  
 Can each boiler be worked separately ✓ Area of fire grate in each boiler 30.5 1/2 ✓ No. and Description of Safety Valves to  
 each boiler 2 direct spring ✓ Area of each valve 3.94 ✓ 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 about 6" ✓ Mean dia. of boilers 10' 0" ✓ Length 9' ✓ 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 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 crown Description of longitudinal joint No. of strengthening rings  
 bottom  
 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 conical heads Working pressure by rules  
 Material of stays Area 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  
 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 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 Steam dome: description of joint to shell % of strength of joint  
 Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes  
 Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

**SUPERHEATER.** Type \_\_\_\_\_ Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_  
 Date of Test \_\_\_\_\_ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from \_\_\_\_\_  
 Diameter of Safety Valve \_\_\_\_\_ Pressure to which each is adjusted \_\_\_\_\_

2000-004900-0062  
183007



IS A DONKEY BOILER FITTED? No. ✓

If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied:— Two top + 2 bottom end bolts + nuts; 2 main bearing + 1 set coupling bolts + nuts; 1 set each, Air, Circulating, Feed, + Bidge pump valves; 1 each, main + donkey check valve; 1 safety valve spring; bolts + nuts assorted.

The foregoing is a correct description,

JOHN LEWIS & SONS, LTD

James J. Dowd Secy

Manufacturers of main Engines.

Dates of Survey while building: During progress of work in shops -- 1914 Sept. 19, Oct. 9, 16, 29 - Nov. 2, 5, 8, 14, 22 - Dec. 6, 11, 12, 14, 22, 28 - 1918 Jan. 4, 14, 19, 23, 28, 31 - Feb. 6, 7, 8, 9, 12, 13 / Total No. of visits 24

Dates of Examination of principal parts: Cylinders 16.29 1.14 6/12 Slides 16/70 2/7 14/7 Covers 16/70 14/7 4/11 4/11 Rods 8.22 6/7 4/7 Connecting rods 8.22 6/7 4/7 Crank shaft 17.11.14 Thrust shaft 22/7 12.14/12 Tunnel shafts ✓ Screw shaft 22/7 6.11.14/12 Propeller 6.11/12

Completion of pumping arrangements 6.2.18 Boilers fixed 28.1.18 Engines tried under steam 12.2.18 Completion of fitting sea connections 29.12.14 Stern tube 28.12.14 Screw shaft and propeller 29.12.14

Main boiler safety valves adjusted 4.2.18 Thickness of adjusting washers Port 13/32 Starboard 3/8 Material of Crank shaft S. Identification Mark on Do. 436 (DUN) Material of Thrust shaft S. Identification Mark on Do. 1152.A

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts S. Identification Marks on Do. 1152.A Material of Steam Pipes Copper, solid drawn 2 tone No ✓ Test pressure 360 lbs per sq 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 have been constructed under Special Survey, and in accordance with the Secretary's Letters, the Rules, and Admiralty specifications + plans. The materials, and workmanship are good. On completion, they together with the boiler (Glasgow Report No 37338 were properly fitted on board the vessel, and tried under steam with satisfactory results, and are now in good order, and in our opinion entitled to the record \* L.M.C. 2.18. in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L M C 2.18.

Handwritten signatures and dates: H.W.D. 21/2/18

Ridley Howell & Reginald Bain Engineer Surveyors to Lloyd's Register of Shipping.

Table with columns for Fee Type, Amount (£), and Date Applied/Received. Includes Entry Fee (£2), Special Classification (£6), Donkey Boiler Fee (£6), and Travelling Expenses (£).

Committee's Minute FRI. 22 FEB. 1918 Assigned + L.M.C. 2.18 MACHINERY CERTIFICATE WRITTEN.

Vertical stamp: Aberdeen Office.

Vertical text on the right edge of the page, including 'Date of writing Report', 'No. in Survey Reg. Book', 'Master', 'Engines made at', 'Boilers made at', 'Registered Horsepower', 'MULTITUBULAR', 'Boilers One', 'No. of Certification', 'safety valves to', 'Are they fitted with', 'Smallest distance between', 'Material of shell', 'Descrip. of rice', 'Lap of plates', 'rules 182', 'boiler 2 pla', 'Description of lo', 'plates: Material', 'Top 8 x 7. If', 'smallest part 1', 'Pitch of stays 1', 'Area supported', 'Lower back pla', 'Pitch of tubes 4', 'water spaces 1', 'girder at centre', 'Working pressu', 'separately -', 'holes - Pi', 'stiffened with', 'Working pressu', 'SURVEY req', 'No. 2045', 'Dates of Survey while building', 'Durin work board', 'GENERAL', 'This boile', 'approved', 'This boile', 'Boiler nou', 'Survey Fe', 'Travelling', 'Committee', 'Assigned', 'Lloyd's Register Foundation'.

