

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

12 JUL 1930

Date of writing Report 11-7-1930 When handed in at Local Office 11-7-1930 Port of Aberdeen
 No. in Survey held at Aberdeen Date, First Survey 26-12-29 Last Survey 7-7-1930
 Reg. Book. on the steam trawler "FRIARAGE."
 Built at Aberdeen By whom built J. Lewis & Sons Ltd. Yard No. 119 Tons { Gross 215.33
 Engines made at Aberdeen By whom made J. Lewis & Sons Ltd. Engine No. 197 Net 93.53
 Boilers made at Aberdeen By whom made J. Lewis & Sons Ltd. Boiler No. 163 When built 1930
 Registered Horse Power Owners J. Graham & Sons Ltd. Port belonging to Hartlepool
 Nom. Horse Power as per Rule 90 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 Trade for which Vessel is intended Fishing.

ENGINES, &c.—Description of Engines

Triple expansion.

Revs. per minute 114

Dia. of Cylinders 12½ - 21 - 34 Length of Stroke 24 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 6.6 Crank pin dia. 6¾ Crank webs Mid. length breadth 10" Thickness parallel to axis 4¾"
 as fitted 6¾ Mid. length thickness 4¾" shrunk Thickness around eye-hole 2¾"
 Intermediate Shafts, diameter as per Rule 6.28 Thrust shaft, diameter at collars as per Rule 6.6
 as fitted 6¾ as fitted 6¾
 Tube Shafts, diameter as per Rule 6.99 Is the { tube } shaft fitted with a continuous liner { yes
 as fitted 7¼ { screw }
 Bronze Liners, thickness in way of bushes as per Rule .507 Thickness between bushes as per Rule .38
 as fitted 9/16 as fitted 12/32 Is the after end of the liner made watertight in the
 propeller boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ✓
 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 ✓ Is an approved Oil Gland or other appliance fitted at the after end of the tube
 shaft no If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller 29"
 Propeller, dia. 8'-6" Pitch 11'-6" No. of Blades 4 Material C.I. whether Moveable no Total Developed Surface 31 sq. feet
 Feed Pumps worked from the Main Engines, No. One Diameter 2¾" Stroke 12" Can one be overhauled while the other is at work ✓
 Bilge Pumps worked from the Main Engines, No. One Diameter 2¾" Stroke 12" Can one be overhauled while the other is at work ✓
 Feed Pumps { No. and size One 5¼ - 3½ - 5" Duplex Pumps connected to the { No. and size One 5¼ - 3½ - 5" Duplex
 { How driven Steam engine. Main Bilge Line { How driven Steam engine.
 Ballast Pumps, No. and size One 5¼ x 3½ x 5" Duplex Lubricating Oil Pumps, including Spare Pump, No. and size ✓
 Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room Two 2", one fwd. & one aft.
 In Holds, &c. One 2" from fish hold; one 2" from slush well.

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 3" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size One 2" ejector. Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges strum boxes
 Are all Sea Connections fitted direct on the skin of the ship yes Are they fitted with 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 Overboard Discharges 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 pass through the bunkers fwd. suction How are they protected wood casing.
 What pipes pass through the deep tanks ✓ Have they been tested as per Rule ✓
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one
 compartment to another yes Is the Shaft Tunnel watertight ✓ Is it fitted with a watertight door ✓ worked from ✓

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 1779 sq. ft.

Is Forced Draft fitted no No. and Description of Boilers One S.E. Main Working Pressure 180 lbs.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? ✓

PLANS. Are approved plans forwarded herewith for Shafting no Main Boilers yes Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval)
 Superheaters ✓ General Pumping Arrangements yes Oil fuel Burning Piping Arrangements ✓

SPARE GEAR. State the articles supplied:— Two top end bolts & nuts, 2 bottom end bolts & nuts,
2 main bearing bolts, 1 set of coupling bolts, 1 set of feed and bilge pump
valves, a quantity of assorted bolts & nuts; Iron of various sizes. 1 set air pump
valves, 1 safety valve spring. 1 escape valve spring for each size fitted, 1 main & 1 auxy
feed check valve. 6 cylinder cover studs & nuts, 6 junk ring bolts & nuts, 3 condenser tubes.
12 condenser ferrules, 3 boiler tubes.

The foregoing is a correct description,
 FOR JOHN LEWIS & SONS, LTD.,

Manufacturer.



© 2020

Lloyd's Register
Foundation

002754-002761-0009

1929. 1930
 Dec. 26. Jan. 21. 31. Feb. 7. 19. March 5. 18. 24. April 2. 5. 17. May 2. 9. 20. 27. June 13.
 During progress of work in shops --
 June 18. 23. 27. 30. July 1. 2. 7.
 During erection on board vessel --
 Total No. of visits 23.
 Dates of Examination of principal parts—Cylinders 2-4-30 Slides 17-4-30 Covers 2-4-30
 Pistons 17-4-30 Piston Rods 2-5-30 Connecting rods 2-5-30.
 Crank shaft 25-10-29 Thrust shaft 20-5-30 Intermediate shafts 20-5-30
 Tube shaft ✓ Screw shaft 20-5-30 Propeller 20-5-30.
 Stern tube 20-5-30 Engine and boiler seatings 13-6-30 Engines holding down bolts 23-6-30
 Completion of fitting sea connections 13-6-30
 Completion of pumping arrangements 7-7-30 Boilers fixed 23-6-30 Engines tried under steam 7-7-30
 Main boiler safety valves adjusted 7-7-30 Thickness of adjusting washers $P \frac{11}{32}$ $S \frac{11}{32}$
 Crank shaft material Steel Identification Mark 521 E.E. Thrust shaft material Steel Identification Mark 3533 P.F.
 Intermediate shafts, material Steel Identification Marks 3533 P.F. Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material Iron. Identification Mark 3533 P.F. Steam Pipes, material S.D. Copper. Test pressure 360 lb Date of Test 27-6-30.
 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 the Rules for the use of oil as fuel been complied with. ✓
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo no If so, have the requirements 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.)
 The machinery of this vessel has been constructed under special survey in accordance with the approved plans & the Rules of this Society.
 The materials and workmanship are good.
 The machinery has been efficiently installed on board the vessel, tried under working conditions, and found good.
 The machinery is eligible in my opinion to have the record + LMC 7.30. C.L. in the Register Book.

It is submitted that
 this vessel is eligible for
 THE RECORD + LMC 7.30 C-L

14/7/30.

The amount of Entry Fee ... £ 2 : - :
 Special ... £ 22 : 10 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 11-7-1930
 When received, 29.7.30

P. Fitzgerald
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

FRI. 18 JUL 1930

+ LMC 7.30

C.L.

CERTIFICATE WRITTEN.



© 2020

Lloyd's Register
 Foundation