

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

23 APR 1929

Date of writing Report 19.4.1929 When handed in at Local Office 19.4.1929 Port of HULL

No. in Survey held at Hull Date, First Survey 25 Oct 1928 Last Survey 17 April 1929

Reg. Book. 61616 the Steam Trawler 'LARWOOD' (Number of Visits 24) Tons { Gross 318.98 Net 146.86

Built Selby By whom built Cochrane & Sons Ltd Yard No. 1042 When built 1929

Engines made at Hull By whom made Amos & Smith Ltd Engine No. 545 when made 1929

Boilers made at Hull By whom made do Boiler No. 545 when made 1929

Registered Horse Power _____ Owners Champion Fishing Co Ltd Port belonging to Grimsby

Nom. Horse Power as per Rule 91 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 _____

Dia. of Cylinders 13" 22 1/4" 37" Length of Stroke 36" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 6.9 Crank pin dia. 4 1/2" Crank webs Mid. length breadth 14 3/4" Thickness parallel to axis 4 1/4"

as fitted 4 1/2" Mid. length thickness 4 1/4" shrunk Thickness around eye-hole 3 1/2"

Intermediate Shafts, diameter as per Rule _____ Thrust shaft, diameter at collars as per Rule 6.9

as fitted 4 3/8" as fitted 4 1/2"

Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 4.4 Is the tube shaft fitted with a continuous liner { Yes

as fitted _____ as fitted 8 1/4" as fitted _____

Bronze Liners, thickness in way of bushes as per Rule _____ Thickness between bushes as per Rule _____ 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 _____

Length of Bearing in Stern Bush next to and supporting propeller 33"

Propeller, dia. 10'-0" Pitch 10'-10" No. of Blades 4 Material Ch. whether Moveable no Total Developed Surface 35 sq. feet

Feed Pumps worked from the Main Engines, No. one Diameter 2 7/8" Stroke 13" Can one be overhauled while the other is at work _____

Bilge Pumps worked from the Main Engines, No. one Diameter 2 7/8" Stroke 13" Can one be overhauled while the other is at work _____

Feed Pumps { No. and size 6 3/4" x 4 3/4" x 6. Pumps connected to the { No. and size 6 3/4" x 4 3/4" x 6 and Ejector.

{ How driven Steam Main Bilge Line { How driven _____

Ballast Pumps, No. and size _____ 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 2 @ 2"

In Holds, &c. 4 @ 2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size one 3 1/2" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one 3" 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 Yes - Steam

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 Forward Suctions 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 1546 sq ft.

Is Forced Draft fitted no No. and Description of Boilers one Simple ended Working Pressure 200 lbs.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

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

PLANS. Are approved plans forwarded herewith for Shafting _____ 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: 2 Bolts & nuts for top ends, bottom ends & main bearings. Set of coupling bolts & nuts. Feed, bilge & air pump valves. Safety valve spring. Main & donkey check valves. 12 Piston studs & nuts. Circ. pump impeller spindle. Bolts & iron of various sizes.

The foregoing is a correct description,
For AMOS & SMITH LTD.

[Signature]
MANAGER.

Manufacturer.



1928. Oct 25. Nov 5. Dec 4. 11. 1929 Jan 4. 15. 21. 24. 25. Feb 5. 9. 11.
 14. Mar 4. 7. 11. 14. Apr 5. 5. 12. 17.

Dates of Survey while building

During progress of work in shops --

During erection on board vessel ---

Total No. of visits 27.

Dates of Examination of principal parts—Cylinders 14. 2. 29 Slides 7. 3. 29 Covers 14. 2. 29
 Pistons 7. 3. 29 Piston Rods 14. 2. 29 Connecting rods 14. 2. 29
 Crank shaft 5. 2. 29 Thrust shaft 9. 2. 29 Intermediate shafts 5. 2. 29
 Tube shaft ✓ Screw shaft 24. 1. 29 Propeller 24. 1. 29
 Stern tube 24. 1. 29 Engine and boiler seatings 5. 4. 29 Engines holding down bolts 5. 4. 29
 Completion of fitting sea connections 11. 2. 29
 Completion of pumping arrangements 12. 4. 29 Boilers fixed 5. 4. 29 Engines tried under steam 12. 4. 29
 Main boiler safety valves adjusted 12. 4. 29 Thickness of adjusting washers A $\frac{11}{32}$ F $\frac{3}{8}$
 Crank shaft material Steel Identification Mark Lloyd's 409 Thrust shaft material Steel Identification Mark Lloyd's 409
 Intermediate shafts, material Steel Identification Marks Lloyd's 409 Tube shaft, material Identification Mark
 Screw shaft, material Steel Identification Mark Lloyd's 409 Steam Pipes, material 1.0 Copper Test pressure 400 lbs. Date of Test 5. 4. 29
 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 the Rules for carrying and burning oil fuel been complied with ✓
 Is this machinery duplicate of a previous case ✓ If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been built under special survey - the materials and workmanship all sound & good. It has been satisfactorily fitted on board, tried under working conditions & found in good order. It is eligible in my opinion to have record of + L.M.C. 4. 29 C.L.

The forging reports in steel wires sent here with refer also to the sister vessel "Perihelion", which will be reported shortly.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 4. 29 C.L

Rev J.S.M.
23. 4. 29

John Shackirdy
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 2 : 0 :
 Special ... £ 22 : 15 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 20 April 1929.
 When received, 24. 5. 1929.

Committee's Minute FRI. 26 APR 1929

Assigned + L.M.C. 4:29 C.L.

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

CERTIFICATE WRITTEN.

